

**Supplementary Table 8:** Classification of the 1097 putative novel RNA-binding proteins in the human genome that were identified in our study.

Proteins annotated as RNA-binding			
Serial number	Entry	Protein name	GO annotation (molecular function)
[1]	Q6NUM6	S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase (EC 4.1.3.44) (Radical S-adenosyl methionine and flavodoxin domain-containing protein 2) (tRNA wybutosine-synthesizing protein 1 homolog B)	4 iron, 4 sulfur cluster binding [GO:0051539]; FMN binding [GO:0010181]; iron ion binding [GO:0005506]; lyase activity [GO:0016829]; oxidoreductase activity [GO:0016491]
[2]	O95551	Tyrosyl-DNA phosphodiesterase 2 (Tyr-DNA phosphodiesterase 2) (hTDP2) (EC 3.1.4.-) (5'-tyrosyl-DNA phosphodiesterase) (5'-Tyr-DNA phosphodiesterase) (ETS1-associated protein 2) (ETS1-associated protein II) (EAPII) (TRAF and TNF receptor-associated protein) (Tyrosyl-RNA phosphodiesterase) (VPg unlinkase)	5'-tyrosyl-DNA phosphodiesterase activity [GO:0070260]; magnesium ion binding [GO:0000287]; manganese ion binding [GO:0030145]; nuclease activity [GO:0004518]; single-stranded DNA binding [GO:0003697]; transcription corepressor activity [GO:0003714]; tyrosyl-RNA phosphodiesterase activity [GO:0036317]
[3]	P31146	Coronin-1A (Coronin-like protein A) (Clipin-A) (Coronin-like protein p57) (Tryptophan aspartate-containing coat protein) (TACO)	actin binding [GO:0003779]; actin filament binding [GO:0051015]; actin monomer binding [GO:0003785]; cytoskeletal protein binding [GO:0008092]; myosin heavy chain binding [GO:0032036]; phosphatidylinositol 3-kinase binding [GO:0043548]; poly(A) RNA binding [GO:0044822]; protein C-terminus binding [GO:0008022]; protein homodimerization activity [GO:0042803]
[4]	A6NEY8	Putative prolyl-tRNA synthetase associated domain-containing protein 1 (PrdX deacylase domain-containing protein 1) (Prolyl-tRNA synthetase associated domain-containing protein 1 pseudogene)	aminoacyl-tRNA editing activity [GO:0002161]
[5]	Q96FN9	Probable D-tyrosyl-tRNA(Tyr) deacylase 2 (EC 3.1.-.-) (D-tyrosyl-tRNA deacylase 2)	aminoacyl-tRNA editing activity [GO:0002161]; D-tyrosyl-tRNA(Tyr) deacylase activity [GO:0051500]
[6]	Q8TEA8	D-tyrosyl-tRNA(Tyr) deacylase 1 (EC 3.1.-.-) (DNA-unwinding element-binding protein B) (DUE-B) (Histidyl-tRNA synthase-related)	aminoacyl-tRNA editing activity [GO:0002161]; DNA binding [GO:0003677]; D-tyrosyl-tRNA(Tyr) deacylase activity [GO:0051500]; metal ion binding [GO:0046872]
[7]	Q15149	Plectin (PCN) (PLTN) (Hemidesmosomal protein 1) (HD1) (Plectin-1)	ankyrin binding [GO:0030506]; poly(A) RNA binding [GO:0044822]; structural constituent of muscle [GO:0008307]
[8]	O95260	Arginyl-tRNA--protein transferase 1 (Arginyltransferase 1) (R-transferase 1) (EC 2.3.2.8) (Arginine-tRNA--protein transferase 1)	arginyltransferase activity [GO:0004057]
[9]	Q8N3C0	Activating signal cointegrator 1 complex subunit 3 (EC 3.6.4.12) (ASC-1 complex subunit p200) (ASC1p200) (Helicase, ATP binding 1) (Trip4 complex subunit p200)	ATP binding [GO:0005524]; ATP-dependent 3'-5' DNA helicase activity [GO:0043140]; poly(A) RNA binding [GO:0044822]
[10]	Q8IYD8	Fanconi anemia group M protein (Protein FACM) (EC 3.6.4.13) (ATP-dependent RNA helicase FANCM) (Fanconi anemia-associated polypeptide of 250 kDa) (FAAP250) (Protein Hef ortholog)	ATP binding [GO:0005524]; chromatin binding [GO:0003682]; DNA binding [GO:0003677]; helicase activity [GO:0004386]; nuclease activity [GO:0004518]
[11]	P21127	Cyclin-dependent kinase 11B (EC 2.7.11.22) (Cell division cycle 2-like protein kinase 1) (CLK-1) (Cell division protein kinase 11B) (Galactosyltransferase-associated protein kinase p58/GTA) (PITSLRE serine/threonine-protein kinase CDC2L1) (p58 CLK-1)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; poly(A) RNA binding [GO:0044822]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[12]	Q7KZI7	Serine/threonine-protein kinase MARK2 (EC	ATP binding [GO:0005524]; lipid binding

		2.7.11.1) (EC 2.7.11.26) (ELKL motif kinase 1) (EMK-1) (MAP/microtubule affinity-regulating kinase 2) (PAR1 homolog) (PAR1 homolog b) (Par-1b) (Par1b)	[GO:0008289]; magnesium ion binding [GO:0000287]; poly(A) RNA binding [GO:0044822]; protein kinase activator activity [GO:0030295]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]
[13]	O75116	Rho-associated protein kinase 2 (EC 2.7.11.1) (Rho kinase 2) (Rho-associated, coiled-coil-containing protein kinase 2) (Rho-associated, coiled-coil-containing protein kinase II) (ROCK-II) (p164 ROCK-2)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; poly(A) RNA binding [GO:0044822]; protein serine/threonine kinase activity [GO:0004674]; Rho-dependent protein serine/threonine kinase activity [GO:0072518]; structural molecule activity [GO:0005198]
[14]	Q9BSD7	Cancer-related nucleoside-triphosphatase (NTPase) (EC 3.6.1.15) (Nucleoside triphosphate phosphohydrolase)	ATP binding [GO:0005524]; nucleoside-triphosphatase activity [GO:0017111]; nucleotide phosphatase activity, acting on free nucleotides [GO:0098519]; poly(A) RNA binding [GO:0044822]
[15]	O75717	WD repeat and HMG-box DNA-binding protein 1 (Acidic nucleoplasmic DNA-binding protein 1) (And-1)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; RNA binding [GO:0003723]
[16]	Q8IZL8	Proline-, glutamic acid- and leucine-rich protein 1 (Modulator of non-genomic activity of estrogen receptor) (Transcription factor HMX3)	chromatin binding [GO:0003682]; poly(A) RNA binding [GO:0044822]; transcription factor binding [GO:0008134]
[17]	Q9NUX5	Protection of telomeres protein 1 (hPot1) (POT1-like telomere end-binding protein)	DEAD/H-box RNA helicase binding [GO:0017151]; G-rich strand telomeric DNA binding [GO:0098505]; single-stranded telomeric DNA binding [GO:0043047]; telomerase inhibitor activity [GO:0010521]
[18]	Q9UH17	DNA dC->dU-editing enzyme APOBEC-3B (A3B) (EC 3.5.4.-) (Phorbolin-1-related protein) (Phorbolin-2/3)	deoxycytidine deaminase activity [GO:0047844]; poly(A) RNA binding [GO:0044822]; zinc ion binding [GO:0008270]
[19]	Q92966	snRNA-activating protein complex subunit 3 (SNAPc subunit 3) (Proximal sequence element-binding transcription factor subunit beta) (PSE-binding factor subunit beta) (PTF subunit beta) (Small nuclear RNA-activating complex polypeptide 3) (snRNA-activating protein complex 50 kDa subunit) (SNAPc 50 kDa subunit)	DNA binding [GO:0003677]
[20]	Q9H171	Z-DNA-binding protein 1 (Tumor stroma and activated macrophage protein DLM-1)	DNA binding [GO:0003677]; double-stranded RNA adenosine deaminase activity [GO:0003726]; left-handed Z-DNA binding [GO:0003692]; RNA binding [GO:0003723]
[21]	O60381	HMG box-containing protein 1 (HMG box transcription factor 1) (High mobility group box transcription factor 1)	DNA binding [GO:0003677]; RNA binding [GO:0003723]
[22]	Q96IC2	Putative RNA exonuclease NEF-sp (EC 3.1.-.-)	exonuclease activity [GO:0004527]; nucleotide binding [GO:0000166]; RNA binding [GO:0003723]
[23]	P07585	Decorin (Bone proteoglycan II) (PG-S2) (PG40)	extracellular matrix binding [GO:0050840]; glycosaminoglycan binding [GO:0005539]; poly(A) RNA binding [GO:0044822]
[24]	Q6NYC1	Bifunctional arginine demethylase and lysyl-hydroxylase JMJD6 (EC 1.14.11.-) (Histone arginine demethylase JMJD6) (JmjC domain-containing protein 6) (Jumonji domain-containing protein 6) (Lysyl-hydroxylase JMJD6) (Peptide-lysine 5-dioxygenase JMJD6) (Phosphatidylserine receptor) (Protein PTDSR)	histone demethylase activity (H3-R2 specific) [GO:0033746]; histone demethylase activity (H4-R3 specific) [GO:0033749]; identical protein binding [GO:0042802]; iron ion binding [GO:0005506]; peptidyl-lysine 5-dioxygenase activity [GO:0070815]; receptor activity [GO:0004872]; RNA binding [GO:0003723]; single-stranded RNA binding [GO:0003727]
[25]	Q9NRW3	DNA dC->dU-editing enzyme APOBEC-3C (A3C) (EC 3.5.4.-) (APOBEC1-like) (Phorbolin I)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amidines [GO:0016814]; poly(A) RNA binding

			[GO:0044822]; zinc ion binding [GO:0008270]
[26]	Q9NR96	Toll-like receptor 9 (CD antigen CD289)	interleukin-1 receptor binding [GO:0005149]; siRNA binding [GO:0035197]; transmembrane signaling receptor activity [GO:0004888]
[27]	O95071	E3 ubiquitin-protein ligase UBR5 (EC 6.3.2.-) (E3 ubiquitin-protein ligase, HECT domain-containing 1) (Hyperplastic discs protein homolog) (hHYD) (Progesterin-induced protein)	ligase activity [GO:0016874]; RNA binding [GO:0003723]; ubiquitin-protein transferase activity [GO:0004842]; ubiquitin-ubiquitin ligase activity [GO:0034450]; zinc ion binding [GO:0008270]
[28]	O75153	Clustered mitochondria protein homolog	mRNA binding [GO:0003729]
[29]	P0DJ4	RNA-binding motif protein, Y chromosome, family 1 member C	nucleotide binding [GO:0000166]; RNA binding [GO:0003723]
[30]	Q9Y4P3	Transducin beta-like protein 2 (WS beta-transducin repeats protein) (WS-betaTRP) (Williams-Beuren syndrome chromosomal region 13 protein)	phosphoprotein binding [GO:0051219]; poly(A) RNA binding [GO:0044822]; protein kinase binding [GO:0019901]; translation initiation factor binding [GO:0031369]
[31]	Q969X6	Cirhin	poly(A) RNA binding [GO:0044822]
[32]	Q96BP2	Coiled-coil-helix-coiled-coil-helix domain-containing protein 1 (28S ribosomal protein S37, mitochondrial) (MRP-S37) (Nuclear protein C2360)	poly(A) RNA binding [GO:0044822]
[33]	P55081	Microfibrillar-associated protein 1	poly(A) RNA binding [GO:0044822]
[34]	Q9BRT6	Protein LLP homolog (Protein LAPS18-like)	poly(A) RNA binding [GO:0044822]
[35]	Q9NNW5	WD repeat-containing protein 6	poly(A) RNA binding [GO:0044822]
[36]	P0CG48	Polyubiquitin-C [Cleaved into: Ubiquitin]	poly(A) RNA binding [GO:0044822]; protease binding [GO:0002020]
[37]	Q68CQ4	Digestive organ expansion factor homolog	poly(A) RNA binding [GO:0044822]; rRNA binding [GO:0019843]; U3 snoRNA binding [GO:0034511]
[38]	Q8IWA0	WD repeat-containing protein 75	poly(A) RNA binding [GO:0044822]; transcription cofactor activity [GO:0003712]
[39]	O95777	U6 snRNA-associated Sm-like protein LSm8	poly(A) RNA binding [GO:0044822]; U6 snRNA binding [GO:0017070]
[40]	Q16576	Histone-binding protein RBBP7 (Histone acetyltransferase type B subunit 2) (Nucleosome-remodeling factor subunit RBAP46) (Retinoblastoma-binding protein 7) (RBBP-7) (Retinoblastoma-binding protein p46)	RNA binding [GO:0003723]
[41]	Q13487	snRNA-activating protein complex subunit 2 (SNAPc subunit 2) (Proximal sequence element-binding transcription factor subunit delta) (PSE-binding factor subunit delta) (PTF subunit delta) (Small nuclear RNA-activating complex polypeptide 2) (snRNA-activating protein complex 45 kDa subunit) (SNAPc 45 kDa subunit)	transcription factor activity, sequence-specific DNA binding [GO:0003700]
[42]	O75971	snRNA-activating protein complex subunit 5 (SNAPc subunit 5) (Small nuclear RNA-activating complex polypeptide 5) (snRNA-activating protein complex 19 kDa subunit) (SNAPc 19 kDa subunit)	transcription factor activity, sequence-specific DNA binding [GO:0003700]
[43]	Q9NSQ0	Putative ribosomal RNA-processing protein 7 homolog B (Putative gastric cancer antigen Zg14-like protein)	
<b>Proteins annotated as DNA-binding</b>			
Serial number	Entry	Protein name	GO annotation (molecular function)
[1]	P49643	DNA primase large subunit (EC 2.7.7.-) (DNA primase 58 kDa subunit) (p58)	4 iron, 4 sulfur cluster binding [GO:0051539]; DNA binding [GO:0003677]; DNA primase activity [GO:0003896]; metal ion binding

			[GO:0046872]
[2]	Q9H790	Exonuclease V (Exo V) (hExo5) (EC 3.1.-.-) (Defects in morphology protein 1 homolog)	4 iron, 4 sulfur cluster binding [GO:0051539]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; single-stranded DNA 3'-5' exodeoxyribonuclease activity [GO:0008310]; single-stranded DNA 5'-3' exodeoxyribonuclease activity [GO:0045145]
[3]	O75417	DNA polymerase theta (EC 2.7.7.7) (DNA polymerase eta)	5'-deoxyribose-5-phosphate lyase activity [GO:0051575]; ATP binding [GO:0005524]; chromatin binding [GO:0003682]; damaged DNA binding [GO:0003684]; DNA-directed DNA polymerase activity [GO:0003887]; single-stranded DNA-dependent ATPase activity [GO:0043142]
[4]	O95551	Tyrosyl-DNA phosphodiesterase 2 (Tyr-DNA phosphodiesterase 2) (hTDP2) (EC 3.1.4.-) (5'-tyrosyl-DNA phosphodiesterase) (5'-Tyr-DNA phosphodiesterase) (ETS1-associated protein 2) (ETS1-associated protein II) (EAPII) (TRAF and TNF receptor-associated protein) (Tyrosyl-RNA phosphodiesterase) (VPg unlinkase)	5'-tyrosyl-DNA phosphodiesterase activity [GO:0070260]; magnesium ion binding [GO:0000287]; manganese ion binding [GO:0030145]; nuclease activity [GO:0004518]; single-stranded DNA binding [GO:0003697]; transcription corepressor activity [GO:0003714]; tyrosyl-RNA phosphodiesterase activity [GO:0036317]
[5]	Q09472	Histone acetyltransferase p300 (p300 HAT) (EC 2.3.1.48) (E1A-associated protein p300)	acetyltransferase activity [GO:0016407]; activating transcription factor binding [GO:0033613]; androgen receptor binding [GO:0050681]; antigen binding [GO:0003823]; beta-catenin binding [GO:0008013]; chromatin binding [GO:0003682]; chromatin DNA binding [GO:0031490]; core promoter binding [GO:0001047]; damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]; histone acetyltransferase activity [GO:0004402]; lysine N-acetyltransferase activity, acting on acetyl phosphate as donor [GO:0004468]; nuclear hormone receptor binding [GO:0035257]; pre-mRNA intronic binding [GO:0097157]; protein C-terminus binding [GO:0008022]; RNA polymerase II activating transcription factor binding [GO:0001102]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001228]; transcription coactivator activity [GO:0003713]; transcription factor binding [GO:0008134]; transferase activity, transferring acyl groups [GO:0016746]; zinc ion binding [GO:0008270]
[6]	Q92793	CREB-binding protein (EC 2.3.1.48)	acetyltransferase activity [GO:0016407]; chromatin binding [GO:0003682]; core promoter proximal region sequence-specific DNA binding [GO:0000987]; damaged DNA binding [GO:0003684]; histone acetyltransferase activity [GO:0004402]; MRF binding [GO:0043426]; p53 binding [GO:0002039]; RNA polymerase II activating transcription factor binding [GO:0001102]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; RNA polymerase II transcription coactivator activity [GO:0001105]; RNA

			polymerase II transcription factor binding [GO:0001085]; signal transducer activity [GO:0004871]; transcriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001228]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcriptional repressor activity, RNA polymerase II transcription factor binding [GO:0001191]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]; zinc ion binding [GO:0008270]
[7]	P10323	Acrosin (EC 3.4.21.10) [Cleaved into: Acrosin light chain; Acrosin heavy chain]	amidase activity [GO:0004040]; copper ion binding [GO:0005507]; DNA binding [GO:0003677]; drug binding [GO:0008144]; fucose binding [GO:0042806]; mannose binding [GO:0005537]; serine-type endopeptidase activity [GO:0004252]; zinc ion binding [GO:0008270]
[8]	Q8TEA8	D-tyrosyl-tRNA(Tyr) deacylase 1 (EC 3.1.-.-) (DNA-unwinding element-binding protein B) (DUE-B) (Histidyl-tRNA synthase-related)	aminoacyl-tRNA editing activity [GO:0002161]; DNA binding [GO:0003677]; D-tyrosyl-tRNA(Tyr) deacylase activity [GO:0051500]; metal ion binding [GO:0046872]
[9]	P50613	Cyclin-dependent kinase 7 (EC 2.7.11.22) (EC 2.7.11.23) (39 kDa protein kinase) (p39 Mo15) (CDK-activating kinase 1) (Cell division protein kinase 7) (Serine/threonine-protein kinase 1) (TFIIH basal transcription factor complex kinase subunit)	androgen receptor binding [GO:0050681]; ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; DNA-dependent ATPase activity [GO:0008094]; protein C-terminus binding [GO:0008022]; protein kinase activity [GO:0004672]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]; transcription coactivator activity [GO:0003713]
[10]	Q9Y4C1	Lysine-specific demethylase 3A (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 2A) (Jumonji domain-containing protein 1A)	androgen receptor binding [GO:0050681]; core promoter binding [GO:0001047]; dioxygenase activity [GO:0051213]; iron ion binding [GO:0005506]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region sequence-specific DNA binding [GO:0000976]
[11]	P78317	E3 ubiquitin-protein ligase RNF4 (EC 6.3.2.-) (RING finger protein 4) (Small nuclear ring finger protein) (Protein SNURF)	androgen receptor binding [GO:0050681]; DNA binding [GO:0003677]; identical protein binding [GO:0042802]; ligase activity [GO:0016874]; nucleosome binding [GO:0031491]; SUMO polymer binding [GO:0032184]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[12]	Q13033	Striatin-3 (Cell cycle autoantigen SG2NA) (S/G2 antigen)	armadillo repeat domain binding [GO:0070016]; calmodulin binding [GO:0005516]; protein complex binding [GO:0032403]; protein phosphatase 2A binding [GO:0051721]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[13]	Q8N3C0	Activating signal cointegrator 1 complex subunit 3 (EC 3.6.4.12) (ASC-1 complex subunit p200) (ASC1p200) (Helicase, ATP binding 1) (Trip4 complex subunit p200)	ATP binding [GO:0005524]; ATP-dependent 3'-5' DNA helicase activity [GO:0043140]; poly(A) RNA binding [GO:0044822]
[14]	O94762	ATP-dependent DNA helicase Q5 (EC 3.6.4.12) (DNA helicase, RecQ-like type 5) (RecQ5) (RecQ	ATP binding [GO:0005524]; ATP-dependent helicase activity [GO:0008026]; DNA helicase

		protein-like 5)	activity [GO:0003678]; nucleic acid binding [GO:0003676]; RNA polymerase II core binding [GO:0000993]
[15]	P43246	DNA mismatch repair protein Msh2 (hMSH2) (MutS protein homolog 2)	ATP binding [GO:0005524]; centromeric DNA binding [GO:0019237]; damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]; DNA-dependent ATPase activity [GO:0008094]; double-strand/single-strand DNA junction binding [GO:0000406]; enzyme binding [GO:0019899]; guanine/thymine mispair binding [GO:0032137]; heteroduplex DNA loop binding [GO:0000404]; protein C-terminus binding [GO:0008022]; protein homodimerization activity [GO:0042803]; protein kinase binding [GO:0019901]; Y-form DNA binding [GO:0000403]
[16]	P20585	DNA mismatch repair protein Msh3 (hMSH3) (Divergent upstream protein) (DUP) (Mismatch repair protein 1) (MRP1)	ATP binding [GO:0005524]; centromeric DNA binding [GO:0019237]; damaged DNA binding [GO:0003684]; DNA-dependent ATPase activity [GO:0008094]; double-strand/single-strand DNA junction binding [GO:0000406]; enzyme binding [GO:0019899]; heteroduplex DNA loop binding [GO:0000404]; Y-form DNA binding [GO:0000403]
[17]	Q8IYD8	Fanconi anemia group M protein (Protein FACM) (EC 3.6.4.13) (ATP-dependent RNA helicase FANCM) (Fanconi anemia-associated polypeptide of 250 kDa) (FAAP250) (Protein Hef ortholog)	ATP binding [GO:0005524]; chromatin binding [GO:0003682]; DNA binding [GO:0003677]; helicase activity [GO:0004386]; nuclease activity [GO:0004518]
[18]	O15457	MutS protein homolog 4 (hMSH4)	ATP binding [GO:0005524]; DNA binding [GO:0003677]; DNA-dependent ATPase activity [GO:0008094]; mismatched DNA binding [GO:0030983]
[19]	P28482	Mitogen-activated protein kinase 1 (MAP kinase 1) (MAPK 1) (EC 2.7.11.24) (ERT1) (Extracellular signal-regulated kinase 2) (ERK-2) (MAP kinase isoform p42) (p42-MAPK) (Mitogen-activated protein kinase 2) (MAP kinase 2) (MAPK 2)	ATP binding [GO:0005524]; DNA binding [GO:0003677]; MAP kinase activity [GO:0004707]; phosphatase binding [GO:0019902]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]
[20]	Q9NTK5	Obg-like ATPase 1 (DNA damage-regulated overexpressed in cancer 45) (DOC45) (GTP-binding protein 9)	ATPase activity [GO:0016887]; ATP binding [GO:0005524]; GTP binding [GO:0005525]; metal ion binding [GO:0046872]; ribosomal large subunit binding [GO:0043023]; ribosome binding [GO:0043022]
[21]	Q9NSC2	Sal-like protein 1 (Spalt-like transcription factor 1) (Zinc finger protein 794) (Zinc finger protein SALL1) (Zinc finger protein Spalt-1) (HSal1) (Sal-1)	beta-catenin binding [GO:0008013]; chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[22]	O60907	F-box-like/WD repeat-containing protein TBL1X (SMAP55) (Transducin beta-like protein 1X) (Transducin-beta-like protein 1, X-linked)	beta-catenin binding [GO:0008013]; histone binding [GO:0042393]; protein C-terminus binding [GO:0008022]; protein domain specific binding [GO:0019904]; transcription corepressor activity [GO:0003714]; transcription factor binding [GO:0008134]; transcription regulatory region DNA binding [GO:0044212]
[23]	Q9BZK7	F-box-like/WD repeat-containing protein TBL1XR1 (Nuclear receptor corepressor/HDAC3	beta-catenin binding [GO:0008013]; histone binding [GO:0042393]; protein N-terminus

		complex subunit TBLR1) (TBL1-related protein 1) (Transducin beta-like 1X-related protein 1)	binding [GO:0047485]; transcription corepressor activity [GO:0003714]; transcription regulatory region DNA binding [GO:0044212]
[24]	Q2QGD7	Zinc finger protein ZXDC (ZXD-like zinc finger protein)	C2H2 zinc finger domain binding [GO:0070742]; LRR domain binding [GO:0030275]; metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[25]	O75575	DNA-directed RNA polymerase III subunit RPC9 (RNA polymerase III subunit C9) (Calcitonin gene-related peptide-receptor component protein) (CGRP-RCP) (CGRP-receptor component protein) (CGRP-RCP) (HsC17)	calcitonin gene-related peptide receptor activity [GO:0001635]; DNA-directed RNA polymerase activity [GO:0003899]; nucleotide binding [GO:0000166]
[26]	P46531	Neurogenic locus notch homolog protein 1 (Notch 1) (hN1) (Translocation-associated notch protein TAN-1) [Cleaved into: Notch 1 extracellular truncation (NEXT); Notch 1 intracellular domain (NICD)]	calcium ion binding [GO:0005509]; chromatin DNA binding [GO:0031490]; core promoter binding [GO:0001047]; enzyme binding [GO:0019899]; enzyme inhibitor activity [GO:0004857]; receptor activity [GO:0004872]; sequence-specific DNA binding [GO:0043565]; transcriptional activator activity, RNA polymerase II transcription factor binding [GO:0001190]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[27]	Q66K89	Transcription factor E4F1 (EC 6.3.2.-) (E4F transcription factor 1) (Putative E3 ubiquitin-protein ligase E4F1) (Transcription factor E4F) (p120E4F) (p50E4F)	cAMP response element binding [GO:0035497]; DNA binding [GO:0003677]; ligase activity [GO:0016874]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001227]; transcription coactivator activity [GO:0003713]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[28]	P41182	B-cell lymphoma 6 protein (BCL-6) (B-cell lymphoma 5 protein) (BCL-5) (Protein LAZ-3) (Zinc finger and BTB domain-containing protein 27) (Zinc finger protein 51)	chromatin binding [GO:0003682]; chromatin DNA binding [GO:0031490]; intronic transcription regulatory region sequence-specific DNA binding [GO:0001161]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001227]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[29]	P27694	Replication protein A 70 kDa DNA-binding subunit (RP-A p70) (Replication factor A protein 1) (RF-A protein 1) (Single-stranded DNA-binding protein) [Cleaved into: Replication protein A 70 kDa DNA-binding subunit, N-terminally processed]	chromatin binding [GO:0003682]; damaged DNA binding [GO:0003684]; metal ion binding [GO:0046872]; single-stranded DNA binding [GO:0003697]
[30]	P05423	DNA-directed RNA polymerase III subunit RPC4 (RNA polymerase III subunit C4) (DNA-directed RNA polymerase III subunit D) (Protein BN51) (RNA polymerase III 47 kDa subunit) (RPC53 homolog)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[31]	O14802	DNA-directed RNA polymerase III subunit RPC1 (RNA polymerase III subunit C1) (EC 2.7.7.6) (DNA-directed RNA polymerase III largest subunit) (DNA-directed RNA polymerase III	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; ribonucleoside binding [GO:0032549]; zinc ion binding [GO:0008270]

		subunit A) (RNA polymerase III 155 kDa subunit) (RPC155) (RNA polymerase III subunit C160)	
[32]	Q9BRR0	Zinc finger protein with KRAB and SCAN domains 3 (Zinc finger and SCAN domain-containing protein 13) (Zinc finger protein 306) (Zinc finger protein 309) (Zinc finger protein 47 homolog) (Zfp47) (Zfp-47)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[33]	Q9HBE1	POZ-, AT hook-, and zinc finger-containing protein 1 (BTB/POZ domain zinc finger transcription factor) (Protein kinase A RI subunit alpha-associated protein) (Zinc finger and BTB domain-containing protein 19) (Zinc finger protein 278) (Zinc finger sarcoma gene protein)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]
[34]	P29375	Lysine-specific demethylase 5A (EC 1.14.11.-) (Histone demethylase JARID1A) (Jumonji/ARID domain-containing protein 1A) (Retinoblastoma-binding protein 2) (RBBP-2)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[35]	O75717	WD repeat and HMG-box DNA-binding protein 1 (Acidic nucleoplasmic DNA-binding protein 1) (And-1)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; RNA binding [GO:0003723]
[36]	Q9BQ87	F-box-like/WD repeat-containing protein TBL1Y (Transducin beta-like protein 1Y) (Transducin-beta-like protein 1, Y-linked)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; transcription corepressor activity [GO:0003714]
[37]	O43623	Zinc finger protein SNAI2 (Neural crest transcription factor Slug) (Protein snail homolog 2)	chromatin binding [GO:0003682]; metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0003705]
[38]	Q9GZV1	Ankyrin repeat domain-containing protein 2 (Skeletal muscle ankyrin repeat protein) (hArpp)	chromatin binding [GO:0003682]; protein kinase B binding [GO:0043422]; RNA polymerase II sequence-specific DNA binding transcription factor binding [GO:0061629]; structural constituent of muscle [GO:0008307]; titin binding [GO:0031432]
[39]	O95409	Zinc finger protein ZIC 2 (Zinc finger protein of the cerebellum 2)	chromatin DNA binding [GO:0031490]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[40]	Q14872	Metal regulatory transcription factor 1 (MRE-binding transcription factor) (Transcription factor MTF-1)	core promoter binding [GO:0001047]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]; transcription coactivator activity [GO:0003713]; transcription factor



			activity, sequence-specific DNA binding [GO:0003700]
[41]	Q00978	Interferon regulatory factor 9 (IRF-9) (IFN-alpha-responsive transcription factor subunit) (ISGF3 p48 subunit) (Interferon-stimulated gene factor 3 gamma) (ISGF-3 gamma) (Transcriptional regulator ISGF3 subunit gamma)	core promoter binding [GO:0001047]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[42]	P31941	DNA dC->dU-editing enzyme APOBEC-3A (A3A) (EC 3.5.4.-) (Phorbolin-1)	cytidine deaminase activity [GO:0004126]; deoxycytidine deaminase activity [GO:0047844]; zinc ion binding [GO:0008270]
[43]	Q9GZX7	Single-stranded DNA cytosine deaminase (EC 3.5.4.38) (Activation-induced cytidine deaminase) (Cytidine aminohydrolase)	cytidine deaminase activity [GO:0004126]; ubiquitin protein ligase binding [GO:0031625]; zinc ion binding [GO:0008270]
[44]	Q16531	DNA damage-binding protein 1 (DDB p127 subunit) (DNA damage-binding protein a) (DDBa) (Damage-specific DNA-binding protein 1) (HBV X-associated protein 1) (XAP-1) (UV-damaged DNA-binding factor) (UV-damaged DNA-binding protein 1) (UV-DDB 1) (XPE-binding factor) (XPE-BF) (Xeroderma pigmentosum group E-complementing protein) (XPCe)	damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]
[45]	Q92466	DNA damage-binding protein 2 (DDB p48 subunit) (DDBb) (Damage-specific DNA-binding protein 2) (UV-damaged DNA-binding protein 2) (UV-DDB 2)	damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]
[46]	Q9NS91	E3 ubiquitin-protein ligase RAD18 (EC 6.3.2.-) (Postreplication repair protein RAD18) (hHR18) (hRAD18) (RING finger protein 73)	damaged DNA binding [GO:0003684]; ligase activity [GO:0016874]; polyubiquitin binding [GO:0031593]; single-stranded DNA-dependent ATPase activity [GO:0043142]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin protein ligase binding [GO:0031625]; Y-form DNA binding [GO:0000403]; zinc ion binding [GO:0008270]
[47]	Q9NUX5	Protection of telomeres protein 1 (hPot1) (POT1-like telomere end-binding protein)	DEAD/H-box RNA helicase binding [GO:0017151]; G-rich strand telomeric DNA binding [GO:0098505]; single-stranded telomeric DNA binding [GO:0043047]; telomerase inhibitor activity [GO:0010521]
[48]	Q9UH17	DNA dC->dU-editing enzyme APOBEC-3B (A3B) (EC 3.5.4.-) (Phorbolin-1-related protein) (Phorbolin-2/3)	deoxycytidine deaminase activity [GO:0047844]; poly(A) RNA binding [GO:0044822]; zinc ion binding [GO:0008270]
[49]	Q9Y5Q8	General transcription factor 3C polypeptide 5 (TF3C-epsilon) (Transcription factor IIIC 63 kDa subunit) (TFIIIC 63 kDa subunit) (TFIIIC63) (Transcription factor IIIC subunit epsilon)	DNA binding [GO:0003677]
[50]	Q969F1	General transcription factor 3C polypeptide 6 (Transcription factor IIIC 35 kDa subunit) (TFIIIC 35 kDa subunit) (TFIIIC35) (Transcription factor IIIC subunit 6)	DNA binding [GO:0003677]
[51]	Q9H9Q4	Non-homologous end-joining factor 1 (Protein cernunnos) (XRCC4-like factor)	DNA binding [GO:0003677]
[52]	Q92966	snRNA-activating protein complex subunit 3 (SNAPc subunit 3) (Proximal sequence element-binding transcription factor subunit beta) (PSE-binding factor subunit beta) (PTF subunit beta) (Small nuclear RNA-activating complex polypeptide 3) (snRNA-activating protein complex 50 kDa subunit) (SNAPc 50 kDa subunit)	DNA binding [GO:0003677]
[53]	Q15573	TATA box-binding protein-associated factor RNA polymerase I subunit A (RNA polymerase I-specific TBP-associated factor 48 kDa) (TAFI48) (TATA box-binding protein-associated factor 1A)	DNA binding [GO:0003677]

		(TBP-associated factor 1A) (Transcription factor SL1) (Transcription initiation factor SL1/TIF-IB subunit A)	
[54]	Q9H5J8	TATA box-binding protein-associated factor RNA polymerase I subunit D (RNA polymerase I-specific TBP-associated factor 41 kDa) (TAFI41) (TATA box-binding protein-associated factor 1D) (TBP-associated factor 1D) (Transcription initiation factor SL1/TIF-IB subunit D)	DNA binding [GO:0003677]
[55]	Q96AP0	Adrenocortical dysplasia protein homolog (POT1 and TIN2-interacting protein)	DNA binding [GO:0003677]; DNA polymerase binding [GO:0070182]
[56]	P19387	DNA-directed RNA polymerase II subunit RPB3 (RNA polymerase II subunit 3) (RNA polymerase II subunit B3) (DNA-directed RNA polymerase II 33 kDa polypeptide) (RPB33) (DNA-directed RNA polymerase II subunit C) (RPB31)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[57]	Q9BUI4	DNA-directed RNA polymerase III subunit RPC3 (RNA polymerase III subunit C3) (DNA-directed RNA polymerase III subunit C) (RNA polymerase III 62 kDa subunit) (RPC62)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[58]	Q9H1D9	DNA-directed RNA polymerase III subunit RPC6 (RNA polymerase III subunit C6) (DNA-directed RNA polymerase III subunit F) (RNA polymerase III 39 kDa subunit) (RPC39)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[59]	Q9Y535	DNA-directed RNA polymerase III subunit RPC8 (RNA polymerase III subunit C8) (DNA-directed RNA polymerase III subunit H) (RNA polymerase III subunit 22.9 kDa subunit) (RPC22.9)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[60]	O15160	DNA-directed RNA polymerases I and III subunit RPAC1 (DNA-directed RNA polymerase I subunit C) (RNA polymerases I and III subunit AC1) (AC40) (DNA-directed RNA polymerases I and III 40 kDa polypeptide) (RPA40) (RPA39) (RPC40)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[61]	Q9Y2S0	DNA-directed RNA polymerases I and III subunit RPAC2 (RNA polymerases I and III subunit AC2) (AC19) (DNA-directed RNA polymerase I subunit D) (RNA polymerase I 16 kDa subunit) (RPA16) (RPC16) (hRPA19)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[62]	Q9BWH6	RNA polymerase II-associated protein 1	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[63]	Q9H9Y6	DNA-directed RNA polymerase I subunit RPA2 (RNA polymerase I subunit 2) (EC 2.7.7.6) (DNA-directed RNA polymerase I 135 kDa polypeptide) (RPA135)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; metal ion binding [GO:0046872]; ribonucleoside binding [GO:0032549]
[64]	Q9NW08	DNA-directed RNA polymerase III subunit RPC2 (RNA polymerase III subunit C2) (EC 2.7.7.6) (C128) (DNA-directed RNA polymerase III 127.6 kDa polypeptide) (DNA-directed RNA polymerase III subunit B)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; metal ion binding [GO:0046872]; ribonucleoside binding [GO:0032549]
[65]	O95602	DNA-directed RNA polymerase I subunit RPA1 (RNA polymerase I subunit A1) (EC 2.7.7.6) (A190) (DNA-directed RNA polymerase I largest subunit) (DNA-directed RNA polymerase I subunit A) (RNA polymerase I 194 kDa subunit) (RPA194)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; zinc ion binding [GO:0008270]
[66]	Q05516	Zinc finger and BTB domain-containing protein 16 (Promyelocytic leukemia zinc finger protein) (Zinc finger protein 145) (Zinc finger protein PLZF)	DNA binding [GO:0003677]; double-stranded DNA binding [GO:0003690]; identical protein binding [GO:0042802]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; RNA polymerase II distal enhancer sequence-specific DNA binding [GO:0000980]; transcriptional repressor activity, RNA polymerase

			II distal enhancer sequence-specific binding [GO:0001206]
[67]	Q9H171	Z-DNA-binding protein 1 (Tumor stroma and activated macrophage protein DLM-1)	DNA binding [GO:0003677]; double-stranded RNA adenosine deaminase activity [GO:0003726]; left-handed Z-DNA binding [GO:0003692]; RNA binding [GO:0003723]
[68]	P25490	Transcriptional repressor protein YY1 (Delta transcription factor) (INO80 complex subunit S) (NF-E1) (Yin and yang 1) (YY-1)	DNA binding [GO:0003677]; enhancer sequence-specific DNA binding [GO:0001158]; four-way junction DNA binding [GO:0000400]; RNA binding [GO:0003723]; SMAD binding [GO:0046332]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription coactivator activity [GO:0003713]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]; zinc ion binding [GO:0008270]
[69]	Q9UKN8	General transcription factor 3C polypeptide 4 (EC 2.3.1.48) (TF3C-delta) (Transcription factor IIIC 90 kDa subunit) (TFIIIC 90 kDa subunit) (TFIIIC90) (Transcription factor IIIC subunit delta)	DNA binding [GO:0003677]; enzyme activator activity [GO:0008047]; histone acetyltransferase activity [GO:0004402]
[70]	Q8N895	Zinc finger protein 366	DNA binding [GO:0003677]; estrogen receptor binding [GO:0030331]; metal ion binding [GO:0046872]; transcription corepressor activity [GO:0003714]
[71]	Q15072	Zinc finger protein OZF (Only zinc finger protein) (Zinc finger protein 146)	DNA binding [GO:0003677]; heparin binding [GO:0008201]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[72]	Q9UGL1	Lysine-specific demethylase 5B (EC 1.14.11.-) (Cancer/testis antigen 31) (CT31) (Histone demethylase JARID1B) (Jumonji/ARID domain-containing protein 1B) (PLU-1) (Retinoblastoma-binding protein 2 homolog 1) (RBP2-H1)	DNA binding [GO:0003677]; histone demethylase activity (H3-dimethyl-K4 specific) [GO:0034648]; histone demethylase activity (H3-K4 specific) [GO:0032453]; histone demethylase activity (H3-trimethyl-K4 specific) [GO:0034647]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[73]	P41229	Lysine-specific demethylase 5C (EC 1.14.11.-) (Histone demethylase JARID1C) (Jumonji/ARID domain-containing protein 1C) (Protein SmcX) (Protein Xe169)	DNA binding [GO:0003677]; histone demethylase activity (H3-K4 specific) [GO:0032453]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; zinc ion binding [GO:0008270]
[74]	Q9BY66	Lysine-specific demethylase 5D (EC 1.14.11.-) (Histocompatibility Y antigen) (H-Y) (Histone demethylase JARID1D) (Jumonji/ARID domain-containing protein 1D) (Protein SmcY)	DNA binding [GO:0003677]; histone demethylase activity (H3-K4 specific) [GO:0032453]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; zinc ion binding [GO:0008270]
[75]	Q14653	Interferon regulatory factor 3 (IRF-3)	DNA binding [GO:0003677]; identical protein

			binding [GO:0042802]; protein homodimerization activity [GO:0042803]; regulatory region DNA binding [GO:0000975]; transcription cofactor activity [GO:0003712]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[76]	P17036	Zinc finger protein 3 (Zinc finger protein HF.12) (Zinc finger protein HZF3.1) (Zinc finger protein KOX25)	DNA binding [GO:0003677]; identical protein binding [GO:0042802]; zinc ion binding [GO:0008270]
[77]	A6NDX5	Putative zinc finger protein 840 (Zinc finger protein 840 pseudogene)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[78]	Q9Y467	Sal-like protein 2 (Zinc finger protein 795) (Zinc finger protein SALL2) (Zinc finger protein Spalt-2) (Sal-2) (hSal2)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[79]	Q9BXA9	Sal-like protein 3 (Zinc finger protein 796) (Zinc finger protein SALL3) (hSALL3)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[80]	P31629	Transcription factor HIVP2 (Human immunodeficiency virus type I enhancer-binding protein 2) (HIV-EP2) (MHC-binding protein 2) (MBP-2)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[81]	P21506	Zinc finger protein 10 (Zinc finger protein KOX1)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[82]	P17021	Zinc finger protein 17 (Zinc finger protein HPF3) (Zinc finger protein KOX10)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[83]	Q13360	Zinc finger protein 177	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[84]	Q2M3W8	Zinc finger protein 181 (HHZ181)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[85]	Q9UL36	Zinc finger protein 236	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[86]	O75437	Zinc finger protein 254 (Bone marrow zinc finger 5) (BMZF-5) (Hematopoietic cell-derived zinc finger protein 1) (HD-ZNF1) (Zinc finger protein 539) (Zinc finger protein 91-like)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[87]	Q9NSD4	Zinc finger protein 275	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[88]	P17041	Zinc finger protein 32 (C2H2-546) (Zinc finger protein KOX30)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[89]	Q96JL9	Zinc finger protein 333	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[90]	Q8TD17	Zinc finger protein 398 (Zinc finger DNA-binding protein p52/p71)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[91]	Q86VK4	Zinc finger protein 410 (Another partner for ARF 1) (Zinc finger protein APA-1)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[92]	Q2M1K9	Zinc finger protein 423 (Olf1/EBF-associated zinc finger protein) (hOAZ) (Smad- and Olf-interacting zinc finger protein)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[93]	Q6IV72	Zinc finger protein 425	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[94]	Q9BUY5	Zinc finger protein 426	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[95]	Q8NDP4	Zinc finger protein 439	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[96]	P15621	Zinc finger protein 44 (Gonadotropin-inducible ovary transcription repressor 2) (GIOT-2) (Zinc finger protein 55) (Zinc finger protein 58) (Zinc finger protein KOX7)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[97]	Q9H7R0	Zinc finger protein 442	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[98]	Q5VIY5	Zinc finger protein 468	DNA binding [GO:0003677]; metal ion binding [GO:0046872]

[99]	Q8NCK3	Zinc finger protein 485	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[100]	Q6ZMY9	Zinc finger protein 517	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[101]	Q8NB42	Zinc finger protein 527	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[102]	Q6P280	Zinc finger protein 529	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[103]	Q8IVP9	Zinc finger protein 547	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[104]	Q96NG5	Zinc finger protein 558	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[105]	Q969W8	Zinc finger protein 566	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[106]	Q96NG8	Zinc finger protein 582	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[107]	Q96JF6	Zinc finger protein 594 (Zinc finger protein HZF18)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[108]	Q8TC21	Zinc finger protein 596	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[109]	Q8N883	Zinc finger protein 614	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[110]	Q8N2I2	Zinc finger protein 619	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[111]	O15015	Zinc finger protein 646	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[112]	Q9BS34	Zinc finger protein 670	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[113]	Q2M3X9	Zinc finger protein 674	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[114]	Q5TEC3	Zinc finger protein 697	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[115]	Q9NV72	Zinc finger protein 701	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[116]	Q8N972	Zinc finger protein 709	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[117]	O43361	Zinc finger protein 749	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[118]	Q86XN6	Zinc finger protein 761	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[119]	Q7L3S4	Zinc finger protein 771 (Mesenchymal stem cell protein DSC43)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[120]	Q147U1	Zinc finger protein 846	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[121]	A8MQ14	Zinc finger protein 850	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[122]	A6NHJ4	Zinc finger protein 860	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[123]	P0CG24	Zinc finger protein 883	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[124]	P0CJ79	Zinc finger protein 888	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[125]	A6NM28	Zinc finger protein 92 homolog (Zfp-92)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[126]	A8MXY4	Zinc finger protein 99	DNA binding [GO:0003677]; metal ion binding [GO:0046872]
[127]	Q9NQV6	PR domain zinc finger protein 10 (EC 2.1.1.-) (PR domain-containing protein 10) (Tristanin)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; methyltransferase activity [GO:0008168]
[128]	Q03923	Zinc finger protein 85 (Zinc finger protein HPF4) (Zinc finger protein HTF1)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding

			[GO:0000978]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[129]	Q9NX65	Zinc finger and SCAN domain-containing protein 32 (Human cervical cancer suppressor gene 5 protein) (HCCS-5) (Zinc finger protein 434)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II transcription factor activity, sequence-specific DNA binding [GO:0000981]
[130]	A6NJL1	Zinc finger and SCAN domain-containing protein 5B	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II transcription factor activity, sequence-specific DNA binding [GO:0000981]
[131]	P13682	Zinc finger protein 35 (Zinc finger protein HF.10)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[132]	Q6ZS27	Zinc finger protein 662	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription cofactor activity [GO:0003712]
[133]	Q8TAW3	Zinc finger protein 671	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription cofactor activity [GO:0003712]
[134]	P52737	Zinc finger protein 136	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription corepressor activity [GO:0003714]
[135]	P0CG31	Putative zinc finger protein 286B	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[136]	Q86W11	Zinc finger and SCAN domain-containing protein 30 (ZNF-WYM) (Zinc finger protein 397 opposite strand) (Zinc finger protein 397OS)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[137]	Q6P2D0	Zinc finger protein 1 homolog (Zfp-1) (Zinc finger protein 475)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[138]	P58317	Zinc finger protein 121 (Zinc finger protein 20)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[139]	Q9HCL3	Zinc finger protein 14 homolog (Zfp-14) (Zinc finger protein 531)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[140]	P52738	Zinc finger protein 140	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[141]	Q12901	Zinc finger protein 155	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[142]	P49910	Zinc finger protein 165 (Cancer/testis antigen 53) (CT53) (LD65) (Zinc finger and SCAN domain-containing protein 7)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[143]	P17025	Zinc finger protein 182 (Zinc finger protein 21) (Zinc finger protein KOX14)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[144]	Q6ZN57	Zinc finger protein 2 homolog (Zfp-2) (Zinc finger protein 751)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[145]	P15622	Zinc finger protein 250 (Zinc finger protein 647)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[146]	Q14587	Zinc finger protein 268 (Zinc finger protein HZF3)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[147]	P17035	Zinc finger protein 28 (Zinc finger protein KOX24)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity,

			sequence-specific DNA binding [GO:0003700]
[148]	Q9HBT8	Zinc finger protein 286A	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[149]	P17039	Zinc finger protein 30 (Zinc finger protein KOX28)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[150]	Q9Y2G7	Zinc finger protein 30 homolog (Zfp-30) (Zinc finger protein 745)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[151]	Q5JNZ3	Zinc finger protein 311 (Zinc finger protein zfp-31)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[152]	Q06730	Zinc finger protein 33A (Zinc finger and ZAK-associated protein with KRAB domain) (ZZaPK) (Zinc finger protein 11A) (Zinc finger protein KOX31)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[153]	O60765	Zinc finger protein 354A (Transcription factor 17) (TCF-17) (Zinc finger protein eZNF)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[154]	Q86Y25	Zinc finger protein 354C (Kidney, ischemia, and developmentally-regulated protein 3) (hKID3)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[155]	Q8NA42	Zinc finger protein 383	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[156]	Q9UJN7	Zinc finger protein 391	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[157]	Q8NF99	Zinc finger protein 397 (Zinc finger and SCAN domain-containing protein 15) (Zinc finger protein 47)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[158]	Q09FC8	Zinc finger protein 415	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[159]	Q6ZR52	Zinc finger protein 493	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[160]	Q96CX3	Zinc finger protein 501 (Zinc finger protein 52)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[161]	Q8N782	Zinc finger protein 525	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[162]	Q7Z398	Zinc finger protein 550	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[163]	Q8N9K5	Zinc finger protein 565	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[164]	Q6ZNG1	Zinc finger protein 600	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[165]	Q8N823	Zinc finger protein 611	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[166]	O75123	Zinc finger protein 623	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[167]	Q9UEG4	Zinc finger protein 629 (Zinc finger protein 65)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]

[168]	Q9H7R5	Zinc finger protein 665 (Zinc finger protein 160-like)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[169]	O75290	Zinc finger protein 780A	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[170]	Q8N141	Zinc finger protein 82 homolog (Zfp-82) (Zinc finger protein 545)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[171]	Q9Y2P0	Zinc finger protein 835	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[172]	Q6ZNA1	Zinc finger protein 836	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[173]	B4DU55	Zinc finger protein 879	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[174]	Q969J2	Zinc finger protein with KRAB and SCAN domains 4 (P373c6.1) (Zinc finger protein 307) (Zinc finger protein 427)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[175]	Q9P0L1	Zinc finger protein with KRAB and SCAN domains 7 (Zinc finger protein 167) (Zinc finger protein 448) (Zinc finger protein 64)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[176]	Q15776	Zinc finger protein with KRAB and SCAN domains 8 (LD5-1) (Zinc finger protein 192)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[177]	Q8TF47	Zinc finger protein 90 homolog (Zfp-90) (Zinc finger protein 756)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]
[178]	P20749	B-cell lymphoma 3 protein (BCL-3) (Proto-oncogene BCL3)	DNA binding [GO:0003677]; protein binding, bridging [GO:0030674]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]
[179]	O14896	Interferon regulatory factor 6 (IRF-6)	DNA binding [GO:0003677]; regulatory region DNA binding [GO:0000975]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[180]	O60381	HMG box-containing protein 1 (HMG box transcription factor 1) (High mobility group box transcription factor 1)	DNA binding [GO:0003677]; RNA binding [GO:0003723]
[181]	Q8TD23	Zinc finger protein 675 (TRAF6-binding zinc finger protein) (TRAF6-inhibitory zinc finger protein)	DNA binding [GO:0003677]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; ubiquitin protein ligase binding [GO:0031625]; zinc ion binding [GO:0008270]
[182]	Q92985	Interferon regulatory factor 7 (IRF-7)	DNA binding [GO:0003677]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcription factor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0000982]
[183]	P62380	TATA box-binding protein-like protein 1 (TBP-like protein 1) (21 kDa TBP-like protein) (Second TBP of unique DNA protein) (STUD) (TATA box-binding protein-related factor 2) (TBP-related factor 2) (TBP-like factor) (TBP-related protein)	DNA binding [GO:0003677]; transcription coactivator activity [GO:0003713]
[184]	P82094	TATA element modulatory factor (TMF) (Androgen receptor coactivator 160 kDa protein) (Androgen receptor-associated protein of 160 kDa)	DNA binding [GO:0003677]; transcription cofactor activity [GO:0003712]
[185]	Q6SJ96	TATA box-binding protein-like protein 2 (TBP-	DNA binding [GO:0003677]; transcription factor



		like protein 2) (TATA box-binding protein-related factor 3) (TBP-related factor 3)	activity, sequence-specific DNA binding [GO:0003700]
[186]	P29374	AT-rich interactive domain-containing protein 4A (ARID domain-containing protein 4A) (Retinoblastoma-binding protein 1) (RBBP-1)	DNA binding [GO:0003677]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]
[187]	Q9NPC7	Myoneurin (Zinc finger and BTB domain-containing protein 31)	DNA binding [GO:0003677]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[188]	Q05481	Zinc finger protein 91 (Zinc finger protein HPF7) (Zinc finger protein HTF10)	DNA binding [GO:0003677]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[189]	O60318	Germinal-center associated nuclear protein (GANP) (80 kDa MCM3-associated protein) (MCM3 acetylating protein) (MCM3AP) (EC 2.3.1.-) (MCM3 acetyltransferase)	DNA binding [GO:0003677]; transferase activity, transferring acyl groups [GO:0016746]
[190]	Q9Y3C5	RING finger protein 11	DNA binding [GO:0003677]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[191]	Q5H9K5	Zinc finger matrin-type protein 1	DNA binding [GO:0003677]; zinc ion binding [GO:0008270]
[192]	Q9H898	Zinc finger matrin-type protein 4	DNA binding [GO:0003677]; zinc ion binding [GO:0008270]
[193]	Q9NVU0	DNA-directed RNA polymerase III subunit RPC5 (RNA polymerase III subunit C5) (DNA-directed RNA polymerase III 80 kDa polypeptide)	DNA-directed RNA polymerase activity [GO:0003899]
[194]	Q9H944	Mediator of RNA polymerase II transcription subunit 20 (Mediator complex subunit 20) (TRF-proximal protein homolog) (hTRFP)	DNA-directed RNA polymerase activity [GO:0003899]; RNA polymerase II transcription cofactor activity [GO:0001104]; transcription coactivator activity [GO:0003713]; ubiquitin protein ligase activity [GO:0061630]
[195]	P20226	TATA-box-binding protein (TATA sequence-binding protein) (TATA-binding factor) (TATA-box factor) (Transcription initiation factor TFIID TBP subunit)	enzyme binding [GO:0019899]; repressing transcription factor binding [GO:0070491]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]; transcription regulatory region DNA binding [GO:0044212]
[196]	Q6W2J9	BCL-6 corepressor (BCoR)	heat shock protein binding [GO:0031072]; histone deacetylase binding [GO:0042826]; transcription corepressor activity [GO:0003714]; transcription factor binding [GO:0008134]; transcription regulatory region DNA binding [GO:0044212]
[197]	Q14526	Hypermethylated in cancer 1 protein (Hic-1) (Zinc finger and BTB domain-containing protein 29)	histone deacetylase binding [GO:0042826]; metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[198]	Q9NRW3	DNA dC->dU-editing enzyme APOBEC-3C (A3C) (EC 3.5.4.-) (APOBEC1-like) (Phorbolin I)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amidines [GO:0016814]; poly(A) RNA binding [GO:0044822]; zinc ion binding [GO:0008270]
[199]	Q96AK3	DNA dC->dU-editing enzyme APOBEC-3D (A3D) (EC 3.5.4.-)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amidines [GO:0016814]; zinc ion binding [GO:0008270]
[200]	O95863	Zinc finger protein SNAI1 (Protein snail homolog 1) (Protein sna)	kinase binding [GO:0019900]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]

[201]	Q8NC42	E3 ubiquitin-protein ligase RNF149 (EC 6.3.2.-) (DNA polymerase-transactivated protein 2) (RING finger protein 149)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[202]	P57071	PR domain zinc finger protein 15 (EC 2.1.1.-) (PR domain-containing protein 15) (Zinc finger protein 298)	metal ion binding [GO:0046872]; methyltransferase activity [GO:0008168]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[203]	B7Z6K7	Putative uncharacterized zinc finger protein 814 (Putative zinc finger protein LOC730051)	metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[204]	P29083	General transcription factor IIE subunit 1 (General transcription factor IIE 56 kDa subunit) (Transcription initiation factor IIE subunit alpha) (TFIIE-alpha)	metal ion binding [GO:0046872]; RNA polymerase II core binding [GO:0000993]; sequence-specific DNA binding [GO:0043565]; TFIID-class transcription factor binding [GO:0001097]; transcription factor activity, core RNA polymerase II binding [GO:0000991]; transcription factor activity, RNA polymerase II transcription factor binding [GO:0001076]
[205]	Q6ZN08	Putative zinc finger protein 66 (Zinc finger protein 66 pseudogene)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[206]	Q6ZMV8	Putative zinc finger protein 730	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[207]	O43296	Zinc finger protein 264	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[208]	Q9H8G1	Zinc finger protein 430	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[209]	Q14592	Zinc finger protein 460 (Zinc finger protein 272) (Zinc finger protein HZF8)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[210]	Q96JC4	Zinc finger protein 479 (Zinc finger protein Kr19) (HKr19)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[211]	Q96H40	Zinc finger protein 486 (KRAB domain only protein 2)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[212]	Q9P255	Zinc finger protein 492 (Zinc finger protein 115)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[213]	Q5JVG8	Zinc finger protein 506	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[214]	Q08ER8	Zinc finger protein 543	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[215]	Q68DY1	Zinc finger protein 626	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[216]	Q8N3J9	Zinc finger protein 664 (Zinc finger protein 176) (Zinc finger protein from organ of Corti)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[217]	Q8N7Q3	Zinc finger protein 676	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[218]	Q8NEM1	Zinc finger protein 680	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region

			sequence-specific DNA binding [GO:0000978]
[219]	O95780	Zinc finger protein 682	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[220]	P17019	Zinc finger protein 708 (Zinc finger protein 15) (Zinc finger protein 15-like 1) (Zinc finger protein KOX8)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[221]	Q96N38	Zinc finger protein 714	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[222]	O75373	Zinc finger protein 737 (Zinc finger protein 102)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[223]	Q5CZA5	Zinc finger protein 805	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[224]	Q9H116	GDNF-inducible zinc finger protein 1 (Zinc finger and BTB domain-containing protein 23) (Zinc finger protein 336)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II distal enhancer sequence-specific DNA binding [GO:0000980]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcriptional repressor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0001206]
[225]	Q9UK33	Zinc finger protein 580 (LDL-induced EC protein)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]
[226]	O43829	Zinc finger and BTB domain-containing protein 14 (Zinc finger protein 161 homolog) (Zfp-161) (Zinc finger protein 478) (Zinc finger protein 5 homolog) (ZF5) (Zfp-5) (hZF5)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; sequence-specific DNA binding [GO:0043565]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]
[227]	P17040	Zinc finger and SCAN domain-containing protein 20 (Zinc finger protein 31) (Zinc finger protein 360) (Zinc finger protein KOX29)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[228]	Q9HCX3	Zinc finger protein 304	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[229]	Q96HQ0	Zinc finger protein 419	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[230]	Q96NI8	Zinc finger protein 570	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[231]	Q96ND8	Zinc finger protein 583 (Zinc finger protein L3-5)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]

[232]	Q6AZW8	Zinc finger protein 660	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[233]	Q5VV52	Zinc finger protein 691	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[234]	Q68DY9	Zinc finger protein 772	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[235]	Q3KQV3	Zinc finger protein 792	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[236]	P08048	Zinc finger Y-chromosomal protein	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[237]	O15391	Transcription factor YY2 (Yin and yang 2) (YY-2) (Zinc finger protein 631)	metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]
[238]	Q13216	DNA excision repair protein ERCC-8 (Cockayne syndrome WD repeat protein CSA)	protein complex binding [GO:0032403]
[239]	Q15542	Transcription initiation factor TFIID subunit 5 (Transcription initiation factor TFIID 100 kDa subunit) (TAF(II)100) (TAFII-100) (TAFII100)	protein dimerization activity [GO:0046983]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]
[240]	Q15306	Interferon regulatory factor 4 (IRF-4) (Lymphocyte-specific interferon regulatory factor) (LSIRF) (Multiple myeloma oncogene 1) (NF-EM5)	protein-lysine N-methyltransferase activity [GO:0016279]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; sequence-specific DNA binding [GO:0043565]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]
[241]	Q02556	Interferon regulatory factor 8 (IRF-8) (Interferon consensus sequence-binding protein) (H-ICSBP) (ICSBP)	regulatory region DNA binding [GO:0000975]; transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0003705]
[242]	Q13568	Interferon regulatory factor 5 (IRF-5)	regulatory region DNA binding [GO:0000975]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[243]	Q03938	Zinc finger protein 90 (Zinc finger protein HTF9)	RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[244]	P58546	Myotrophin (Protein V-1)	sequence-specific DNA binding [GO:0043565]
[245]	O75529	TAF5-like RNA polymerase II p300/CBP-associated factor-associated factor 65 kDa subunit 5L (PCAF-associated factor 65 beta) (PAF65-beta)	transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[246]	P54198	Protein HIRA (TUP1-like enhancer of split protein 1)	transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]

[247]	Q13487	snRNA-activating protein complex subunit 2 (SNAPc subunit 2) (Proximal sequence element-binding transcription factor subunit delta) (PSE-binding factor subunit delta) (PTF subunit delta) (Small nuclear RNA-activating complex polypeptide 2) (snRNA-activating protein complex 45 kDa subunit) (SNAPc 45 kDa subunit)	transcription factor activity, sequence-specific DNA binding [GO:0003700]
[248]	O75971	snRNA-activating protein complex subunit 5 (SNAPc subunit 5) (Small nuclear RNA-activating complex polypeptide 5) (snRNA-activating protein complex 19 kDa subunit) (SNAPc 19 kDa subunit)	transcription factor activity, sequence-specific DNA binding [GO:0003700]
[249]	Q8TAE8	Growth arrest and DNA damage-inducible proteins-interacting protein 1 (39S ribosomal protein L59, mitochondrial) (MRP-L59) (CKII beta-associating protein) (CR6-interacting factor 1) (CRIF1) (Papillomavirus L2-interacting nuclear protein 1) (PLINP) (PLINP-1) (p53-responsive gene 6 protein)	
[250]	Q53HC9	Protein TSSC1 (Tumor-suppressing STF cDNA 1 protein) (Tumor-suppressing subchromosomal transferable fragment candidate gene 1 protein)	

### Proteins annotated as enzymes

Serial number	Entry	Protein name	GO annotation (molecular function)
[1]	Q13131	5'-AMP-activated protein kinase catalytic subunit alpha-1 (AMPK subunit alpha-1) (EC 2.7.11.1) (Acetyl-CoA carboxylase kinase) (ACACA kinase) (EC 2.7.11.27) (Hydroxymethylglutaryl-CoA reductase kinase) (HMGCR kinase) (EC 2.7.11.31) (Tau-protein kinase PRKAA1) (EC 2.7.11.26)	[acetyl-CoA carboxylase] kinase activity [GO:0050405]; [hydroxymethylglutaryl-CoA reductase (NADPH)] kinase activity [GO:0047322]; AMP-activated protein kinase activity [GO:0004679]; ATP binding [GO:0005524]; cAMP-dependent protein kinase activity [GO:0004691]; chromatin binding [GO:0003682]; histone serine kinase activity [GO:0035174]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; tau-protein kinase activity [GO:0050321]
[2]	P54646	5'-AMP-activated protein kinase catalytic subunit alpha-2 (AMPK subunit alpha-2) (EC 2.7.11.1) (Acetyl-CoA carboxylase kinase) (ACACA kinase) (EC 2.7.11.27) (Hydroxymethylglutaryl-CoA reductase kinase) (HMGCR kinase) (EC 2.7.11.31)	[acetyl-CoA carboxylase] kinase activity [GO:0050405]; [hydroxymethylglutaryl-CoA reductase (NADPH)] kinase activity [GO:0047322]; AMP-activated protein kinase activity [GO:0004679]; ATP binding [GO:0005524]; chromatin binding [GO:0003682]; histone serine kinase activity [GO:0035174]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]
[3]	Q8IZQ1	WD repeat and FYVE domain-containing protein 3 (Autophagy-linked FYVE protein) (Alfy)	1-phosphatidylinositol binding [GO:0005545]; beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase activity [GO:0003831]; metal ion binding [GO:0046872]
[4]	P31749	RAC-alpha serine/threonine-protein kinase (EC 2.7.11.1) (Protein kinase B) (PKB) (Protein kinase B alpha) (PKB alpha) (Proto-oncogene c-Akt) (RAC-PK-alpha)	14-3-3 protein binding [GO:0071889]; ATP binding [GO:0005524]; enzyme binding [GO:0019899]; identical protein binding [GO:0042802]; kinase activity [GO:0016301]; nitric-oxide synthase regulator activity [GO:0030235]; phosphatidylinositol-3,4,5-trisphosphate binding [GO:0005547]; phosphatidylinositol-3,4-bisphosphate binding [GO:0043325]; protein kinase activity [GO:0004672]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]
[5]	O15439	Multidrug resistance-associated protein 4 (ATP-binding cassette sub-family C member 4)	15-hydroxyprostaglandin dehydrogenase (NAD+) activity [GO:0016404]; ATPase activity, coupled

		(MRP/cMOAT-related ABC transporter) (Multi-specific organic anion transporter B) (MOAT-B)	to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[6]	O15530	3-phosphoinositide-dependent protein kinase 1 (hPDK1) (EC 2.7.11.1)	3-phosphoinositide-dependent protein kinase activity [GO:0004676]; ATP binding [GO:0005524]; phospholipase activator activity [GO:0016004]; phospholipase binding [GO:0043274]; protein serine/threonine kinase activity [GO:0004674]
[7]	Q9NVH0	Exonuclease 3'-5' domain-containing protein 2 (Exonuclease 3'-5' domain-like-containing protein 2)	3'-5' exonuclease activity [GO:0008408]; nucleic acid binding [GO:0003676]
[8]	P49643	DNA primase large subunit (EC 2.7.7.-) (DNA primase 58 kDa subunit) (p58)	4 iron, 4 sulfur cluster binding [GO:0051539]; DNA binding [GO:0003677]; DNA primase activity [GO:0003896]; metal ion binding [GO:0046872]
[9]	Q9H790	Exonuclease V (Exo V) (hExo5) (EC 3.1.-.-) (Defects in morphology protein 1 homolog)	4 iron, 4 sulfur cluster binding [GO:0051539]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; single-stranded DNA 3'-5' exodeoxyribonuclease activity [GO:0008310]; single-stranded DNA 5'-3' exodeoxyribonuclease activity [GO:0045145]
[10]	Q6NUM6	S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase (EC 4.1.3.44) (Radical S-adenosyl methionine and flavodoxin domain-containing protein 2) (tRNA wybutosine-synthesizing protein 1 homolog B)	4 iron, 4 sulfur cluster binding [GO:0051539]; FMN binding [GO:0010181]; iron ion binding [GO:0005506]; lyase activity [GO:0016829]; oxidoreductase activity [GO:0016491]
[11]	O75417	DNA polymerase theta (EC 2.7.7.7) (DNA polymerase eta)	5'-deoxyribose-5-phosphate lyase activity [GO:0051575]; ATP binding [GO:0005524]; chromatin binding [GO:0003682]; damaged DNA binding [GO:0003684]; DNA-directed DNA polymerase activity [GO:0003887]; single-stranded DNA-dependent ATPase activity [GO:0043142]
[12]	O95551	Tyrosyl-DNA phosphodiesterase 2 (Tyr-DNA phosphodiesterase 2) (hTDP2) (EC 3.1.4.-) (5'-tyrosyl-DNA phosphodiesterase) (5'-Tyr-DNA phosphodiesterase) (ETS1-associated protein 2) (ETS1-associated protein II) (EAPII) (TRAF and TNF receptor-associated protein) (Tyrosyl-RNA phosphodiesterase) (VPg unlinkase)	5'-tyrosyl-DNA phosphodiesterase activity [GO:0070260]; magnesium ion binding [GO:0000287]; manganese ion binding [GO:0030145]; nuclease activity [GO:0004518]; single-stranded DNA binding [GO:0003697]; transcription corepressor activity [GO:0003714]; tyrosyl-RNA phosphodiesterase activity [GO:0036317]
[13]	Q00535	Cyclin-dependent-like kinase 5 (EC 2.7.11.1) (Cell division protein kinase 5) (Serine/threonine-protein kinase PSSALRE) (Tau protein kinase II catalytic subunit) (TPKII catalytic subunit)	acetylcholine receptor activator activity [GO:0030549]; ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; ErbB-2 class receptor binding [GO:0005176]; ErbB-3 class receptor binding [GO:0043125]; kinase activity [GO:0016301]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]
[14]	Q09472	Histone acetyltransferase p300 (p300 HAT) (EC 2.3.1.48) (E1A-associated protein p300)	acetyltransferase activity [GO:0016407]; activating transcription factor binding [GO:0033613]; androgen receptor binding [GO:0050681]; antigen binding [GO:0003823]; beta-catenin binding [GO:0008013]; chromatin binding [GO:0003682]; chromatin DNA binding [GO:0031490]; core promoter binding [GO:0001047]; damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]; histone acetyltransferase activity [GO:0004402]; lysine N-acetyltransferase activity,

			<p>acting on acetyl phosphate as donor [GO:0004468]; nuclear hormone receptor binding [GO:0035257]; pre-mRNA intronic binding [GO:0097157]; protein C-terminus binding [GO:0008022]; RNA polymerase II activating transcription factor binding [GO:0001102]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001228]; transcription coactivator activity [GO:0003713]; transcription factor binding [GO:0008134]; transferase activity, transferring acyl groups [GO:0016746]; zinc ion binding [GO:0008270]</p>
[15]	Q92793	CREB-binding protein (EC 2.3.1.48)	<p>acetyltransferase activity [GO:0016407]; chromatin binding [GO:0003682]; core promoter proximal region sequence-specific DNA binding [GO:0000987]; damaged DNA binding [GO:0003684]; histone acetyltransferase activity [GO:0004402]; MRF binding [GO:0043426]; p53 binding [GO:0002039]; RNA polymerase II activating transcription factor binding [GO:0001102]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; RNA polymerase II transcription coactivator activity [GO:0001105]; RNA polymerase II transcription factor binding [GO:0001085]; signal transducer activity [GO:0004871]; transcriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001228]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcriptional repressor activity, RNA polymerase II transcription factor binding [GO:0001191]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]; zinc ion binding [GO:0008270]</p>
[16]	P31146	Coronin-1A (Coronin-like protein A) (Clipin-A) (Coronin-like protein p57) (Tryptophan aspartate-containing coat protein) (TACO)	<p>actin binding [GO:0003779]; actin filament binding [GO:0051015]; actin monomer binding [GO:0003785]; cytoskeletal protein binding [GO:0008092]; myosin heavy chain binding [GO:0032036]; phosphatidylinositol 3-kinase binding [GO:0043548]; poly(A) RNA binding [GO:0044822]; protein C-terminus binding [GO:0008022]; protein homodimerization activity [GO:0042803]</p>
[17]	Q5S007	Leucine-rich repeat serine/threonine-protein kinase 2 (EC 2.7.11.1) (Dardarin)	<p>actin binding [GO:0003779]; ATP binding [GO:0005524]; clathrin binding [GO:0030276]; glycoprotein binding [GO:0001948]; GTPase activator activity [GO:0005096]; GTPase activity [GO:0003924]; GTP binding [GO:0005525]; GTP-dependent protein kinase activity [GO:0034211]; identical protein binding [GO:0042802]; ion channel binding [GO:0044325]; kinase activity [GO:0016301]; MAP kinase kinase activity [GO:0004708]; peroxidase inhibitor activity [GO:0036479]; protein homodimerization activity</p>

			[GO:0042803]; protein kinase A binding [GO:0051018]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; Rho GTPase binding [GO:0017048]; SNARE binding [GO:0000149]; syntaxin-1 binding [GO:0017075]; tubulin binding [GO:0015631]
[18]	Q9Y6X6	Unconventional myosin-XVI (Neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adapter 3) (Unconventional myosin-16)	actin filament binding [GO:0051015]; ATP binding [GO:0005524]; motor activity [GO:0003774]
[19]	Q02156	Protein kinase C epsilon type (EC 2.7.11.13) (nPKC-epsilon)	actin monomer binding [GO:0003785]; ATP binding [GO:0005524]; calcium-independent protein kinase C activity [GO:0004699]; enzyme activator activity [GO:0008047]; enzyme binding [GO:0019899]; ethanol binding [GO:0035276]; metal ion binding [GO:0046872]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]; receptor activator activity [GO:0030546]; signal transducer activity [GO:0004871]
[20]	Q8NEV4	Myosin-IIa (EC 2.7.11.1)	actin-dependent ATPase activity [GO:0030898]; ADP binding [GO:0043531]; ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; microfilament motor activity [GO:0000146]; plus-end directed microfilament motor activity [GO:0060002]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[21]	P36896	Activin receptor type-1B (EC 2.7.11.30) (Activin receptor type IB) (ACTR-IB) (Activin receptor-like kinase 4) (ALK-4) (Serine/threonine-protein kinase receptor R2) (SKR2)	activin receptor activity, type I [GO:0016361]; ATP binding [GO:0005524]; inhibin binding [GO:0034711]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]; receptor signaling protein serine/threonine kinase activity [GO:0004702]; SMAD binding [GO:0046332]; transmembrane receptor protein serine/threonine kinase activity [GO:0004675]; ubiquitin protein ligase binding [GO:0031625]
[22]	P54819	Adenylate kinase 2, mitochondrial (AK 2) (EC 2.7.4.3) (ATP-AMP transphosphorylase 2) (ATP:AMP phosphotransferase) (Adenylate monophosphate kinase) [Cleaved into: Adenylate kinase 2, mitochondrial, N-terminally processed]	adenylate kinase activity [GO:0004017]; ATP binding [GO:0005524]
[23]	P27144	Adenylate kinase 4, mitochondrial (AK 4) (EC 2.7.4.10) (EC 2.7.4.6) (Adenylate kinase 3-like) (GTP:AMP phosphotransferase AK4)	adenylate kinase activity [GO:0004017]; ATP binding [GO:0005524]; GTP binding [GO:0005525]; nucleoside diphosphate kinase activity [GO:0004550]; nucleoside triphosphate adenylate kinase activity [GO:0046899]
[24]	O14727	Apoptotic protease-activating factor 1 (APAF-1)	ADP binding [GO:0043531]; ATP binding [GO:0005524]; cysteine-type endopeptidase activator activity involved in apoptotic process [GO:0008656]; nucleotide binding [GO:0000166]
[25]	Q8NI60	Atypical kinase ADCK3, mitochondrial (EC 2.7.-.-) (Chaperone activity of bcl complex-like) (Chaperone-ABC1-like) (aarF domain-containing protein kinase 3)	ADP binding [GO:0043531]; ATP binding [GO:0005524]; kinase activity [GO:0016301]
[26]	Q03518	Antigen peptide transporter 1 (APT1) (ATP-binding cassette sub-family B member 2) (Peptide supply factor 1) (Peptide transporter PSF1) (PSF-1) (Peptide transporter TAP1) (Peptide transporter involved in antigen processing 1) (Really interesting new gene 4 protein)	ADP binding [GO:0043531]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; MHC class Ib protein binding [GO:0023029]; peptide antigen binding [GO:0042605]; peptide transporter activity



			[GO:0015197]; peptide-transporting ATPase activity [GO:0015440]; protein homodimerization activity [GO:0042803]; TAP1 binding [GO:0046978]; TAP2 binding [GO:0046979]
[27]	O75891	Cytosolic 10-formyltetrahydrofolate dehydrogenase (10-FTHFDH) (FDH) (EC 1.5.1.6) (Aldehyde dehydrogenase family 1 member L1)	aldehyde dehydrogenase (NAD) activity [GO:0004029]; catalytic activity [GO:0003824]; formyltetrahydrofolate dehydrogenase activity [GO:0016155]; hydroxymethyl-, formyl- and related transferase activity [GO:0016742]; methyltransferase activity [GO:0008168]
[28]	Q3SY69	Mitochondrial 10-formyltetrahydrofolate dehydrogenase (Mitochondrial 10-FTHFDH) (mtFDH) (EC 1.5.1.6) (Aldehyde dehydrogenase family 1 member L2)	aldehyde dehydrogenase (NAD) activity [GO:0004029]; formyltetrahydrofolate dehydrogenase activity [GO:0016155]; hydroxymethyl-, formyl- and related transferase activity [GO:0016742]; methyltransferase activity [GO:0008168]
[29]	P25098	Beta-adrenergic receptor kinase 1 (Beta-ARK-1) (EC 2.7.11.15) (G-protein coupled receptor kinase 2)	alpha-2A adrenergic receptor binding [GO:0031694]; ATP binding [GO:0005524]; beta-adrenergic receptor kinase activity [GO:0047696]; Edg-2 lysophosphatidic acid receptor binding [GO:0031755]; G-protein coupled receptor kinase activity [GO:0004703]; protein kinase activity [GO:0004672]
[30]	P10323	Acrosin (EC 3.4.21.10) [Cleaved into: Acrosin light chain; Acrosin heavy chain]	amidase activity [GO:0004040]; copper ion binding [GO:0005507]; DNA binding [GO:0003677]; drug binding [GO:0008144]; fucose binding [GO:0042806]; mannose binding [GO:0005537]; serine-type endopeptidase activity [GO:0004252]; zinc ion binding [GO:0008270]
[31]	A6NEY8	Putative prolyl-tRNA synthetase associated domain-containing protein 1 (PrdX deacylase domain-containing protein 1) (Prolyl-tRNA synthetase associated domain-containing protein 1 pseudogene)	aminoacyl-tRNA editing activity [GO:0002161]
[32]	Q96FN9	Probable D-tyrosyl-tRNA(Tyr) deacylase 2 (EC 3.1.-.-) (D-tyrosyl-tRNA deacylase 2)	aminoacyl-tRNA editing activity [GO:0002161]; D-tyrosyl-tRNA(Tyr) deacylase activity [GO:0051500]
[33]	Q8TEA8	D-tyrosyl-tRNA(Tyr) deacylase 1 (EC 3.1.-.-) (DNA-unwinding element-binding protein B) (DUE-B) (Histidyl-tRNA synthase-related)	aminoacyl-tRNA editing activity [GO:0002161]; DNA binding [GO:0003677]; D-tyrosyl-tRNA(Tyr) deacylase activity [GO:0051500]; metal ion binding [GO:0046872]
[34]	P53582	Methionine aminopeptidase 1 (MAP 1) (MetAP 1) (EC 3.4.11.18) (Peptidase M 1)	aminopeptidase activity [GO:0004177]; metal ion binding [GO:0046872]; metalloaminopeptidase activity [GO:0070006]; metalloexopeptidase activity [GO:0008235]
[35]	P53350	Serine/threonine-protein kinase PLK1 (EC 2.7.11.21) (Polo-like kinase 1) (PLK-1) (Serine/threonine-protein kinase 13) (STPK13)	anaphase-promoting complex binding [GO:0010997]; ATP binding [GO:0005524]; kinase activity [GO:0016301]; microtubule binding [GO:0008017]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]
[36]	P05771	Protein kinase C beta type (PKC-B) (PKC-beta) (EC 2.7.11.13)	androgen receptor binding [GO:0050681]; ATP binding [GO:0005524]; calcium channel regulator activity [GO:0005246]; chromatin binding [GO:0003682]; histone binding [GO:0042393]; histone kinase activity (H3-T6 specific) [GO:0035403]; ligand-dependent nuclear receptor transcription coactivator activity [GO:0030374]; protein kinase C activity [GO:0004697]; protein kinase C binding [GO:0005080]; protein serine/threonine kinase activity [GO:0004674];

			zinc ion binding [GO:0008270]
[37]	Q16512	Serine/threonine-protein kinase N1 (EC 2.7.11.13) (Protease-activated kinase 1) (PAK-1) (Protein kinase C-like 1) (Protein kinase C-like PKN) (Protein kinase PKN-alpha) (Protein-kinase C-related kinase 1) (Serine-threonine protein kinase N)	androgen receptor binding [GO:0050681]; ATP binding [GO:0005524]; chromatin binding [GO:0003682]; GTP-Rho binding [GO:0017049]; histone binding [GO:0042393]; histone deacetylase binding [GO:0042826]; histone kinase activity (H3-T11 specific) [GO:0035402]; ligand-dependent nuclear receptor transcription coactivator activity [GO:0030374]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein kinase C binding [GO:0005080]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[38]	P50613	Cyclin-dependent kinase 7 (EC 2.7.11.22) (EC 2.7.11.23) (39 kDa protein kinase) (p39 Mo15) (CDK-activating kinase 1) (Cell division protein kinase 7) (Serine/threonine-protein kinase 1) (TFIIH basal transcription factor complex kinase subunit)	androgen receptor binding [GO:0050681]; ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; DNA-dependent ATPase activity [GO:0008094]; protein C-terminus binding [GO:0008022]; protein kinase activity [GO:0004672]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]; transcription coactivator activity [GO:0003713]
[39]	Q9Y4C1	Lysine-specific demethylase 3A (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 2A) (Jumonji domain-containing protein 1A)	androgen receptor binding [GO:0050681]; core promoter binding [GO:0001047]; dioxygenase activity [GO:0051213]; iron ion binding [GO:0005506]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region sequence-specific DNA binding [GO:0000976]
[40]	Q9H3R0	Lysine-specific demethylase 4C (EC 1.14.11.-) (Gene amplified in squamous cell carcinoma 1 protein) (GASC-1 protein) (JmjC domain-containing histone demethylation protein 3C) (Jumonji domain-containing protein 2C)	androgen receptor binding [GO:0050681]; dioxygenase activity [GO:0051213]; enzyme binding [GO:0019899]; histone demethylase activity [GO:0032452]; histone demethylase activity (H3-K9 specific) [GO:0032454]; zinc ion binding [GO:0008270]
[41]	P78317	E3 ubiquitin-protein ligase RNF4 (EC 6.3.2.-) (RING finger protein 4) (Small nuclear ring finger protein) (Protein SNURF)	androgen receptor binding [GO:0050681]; DNA binding [GO:0003677]; identical protein binding [GO:0042802]; ligase activity [GO:0016874]; nucleosome binding [GO:0031491]; SUMO polymer binding [GO:0032184]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[42]	Q92993	Histone acetyltransferase KAT5 (EC 2.3.1.48) (60 kDa Tat-interactive protein) (Tip60) (Histone acetyltransferase HTATIP) (HIV-1 Tat interactive protein) (Lysine acetyltransferase 5) (cPLA(2)-interacting protein)	androgen receptor binding [GO:0050681]; histone acetyltransferase activity [GO:0004402]; metal ion binding [GO:0046872]; repressing transcription factor binding [GO:0070491]; transcription coactivator activity [GO:0003713]
[43]	O95477	ATP-binding cassette sub-family A member 1 (ATP-binding cassette transporter 1) (ABC-1) (ATP-binding cassette 1) (Cholesterol efflux regulatory protein)	anion transmembrane transporter activity [GO:0008509]; apolipoprotein A-I binding [GO:0034186]; apolipoprotein A-I receptor activity [GO:0034188]; apolipoprotein binding [GO:0034185]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATPase binding [GO:0051117]; ATP binding [GO:0005524]; cholesterol binding [GO:0015485]; cholesterol transporter activity [GO:0017127]; phospholipid binding [GO:0005543]; phospholipid transporter activity

			[GO:0005548]; receptor binding [GO:0005102]; small GTPase binding [GO:0031267]; syntaxin binding [GO:0019905]
[44]	Q5VST9	Obscurin (EC 2.7.11.1) (Obscurin-RhoGEF) (Obscurin-myosin light chain kinase) (Obscurin-MLCK)	ankyrin binding [GO:0030506]; ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]; Rho guanyl-nucleotide exchange factor activity [GO:0005089]; structural constituent of muscle [GO:0008307]; titin binding [GO:0031432]
[45]	Q7LBC6	Lysine-specific demethylase 3B (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 2B) (Jumonji domain-containing protein 1B) (Nuclear protein 5qNCA)	antioxidant activity [GO:0016209]; dioxygenase activity [GO:0051213]; metal ion binding [GO:0046872]
[46]	Q8IZY2	ATP-binding cassette sub-family A member 7 (ABCA-SSN) (Autoantigen SS-N) (Macrophage ABC transporter)	apolipoprotein A-I receptor activity [GO:0034188]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; cholesterol transporter activity [GO:0017127]; phospholipid transporter activity [GO:0005548]; transporter activity [GO:0005215]
[47]	Q86UK0	ATP-binding cassette sub-family A member 12 (ATP-binding cassette transporter 12) (ATP-binding cassette 12)	apolipoprotein A-I receptor binding [GO:0034191]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; cholesterol transporter activity [GO:0017127]; lipid transporter activity [GO:0005319]; lipid-transporting ATPase activity [GO:0034040]; phospholipid transporter activity [GO:0005548]; receptor binding [GO:0005102]
[48]	P08519	Apolipoprotein(a) (Apo(a)) (Lp(a)) (EC 3.4.21.-)	apolipoprotein binding [GO:0034185]; endopeptidase inhibitor activity [GO:0004866]; fibronectin binding [GO:0001968]; heparin binding [GO:0008201]; serine-type endopeptidase activity [GO:0004252]
[49]	O95260	Arginyl-tRNA--protein transferase 1 (Arginyltransferase 1) (R-transferase 1) (EC 2.3.2.8) (Arginine-tRNA--protein transferase 1)	arginyltransferase activity [GO:0004057]
[50]	O43815	Striatin	armadillo repeat domain binding [GO:0070016]; calmodulin binding [GO:0005516]; estrogen receptor binding [GO:0030331]; protein complex binding [GO:0032403]; protein phosphatase 2A binding [GO:0051721]
[51]	Q9NRL3	Striatin-4 (Zinedin)	armadillo repeat domain binding [GO:0070016]; calmodulin binding [GO:0005516]; protein complex binding [GO:0032403]; protein phosphatase 2A binding [GO:0051721]
[52]	Q13033	Striatin-3 (Cell cycle autoantigen SG2NA) (S/G2 antigen)	armadillo repeat domain binding [GO:0070016]; calmodulin binding [GO:0005516]; protein complex binding [GO:0032403]; protein phosphatase 2A binding [GO:0051721]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[53]	Q9Y6I0	Endogenous retrovirus group K member 6 Pro protein (HERV-K(C7) Pro protein) (HERV-K(HML-2.HOM) Pro protein) (HERV-K108 Pro protein) (HERV-K_7p22.1 provirus ancestral Pro protein) (EC 3.4.23.50) (Protease) (Proteinase) (PR)	aspartic-type endopeptidase activity [GO:0004190]; nucleic acid binding [GO:0003676]
[54]	P13569	Cystic fibrosis transmembrane conductance regulator (CFTR) (ATP-binding cassette sub-family C member 7) (Channel conductance-	ATP binding [GO:0005524]; ATP-binding and phosphorylation-dependent chloride channel activity [GO:0005224]; bicarbonate

		controlling ATPase) (EC 3.6.3.49) (cAMP-dependent chloride channel)	transmembrane transporter activity [GO:0015106]; channel-conductance-controlling ATPase activity [GO:0005260]; chloride channel activity [GO:0005254]; chloride channel inhibitor activity [GO:0019869]; chloride transmembrane transporter activity [GO:0015108]; enzyme binding [GO:0019899]; PDZ domain binding [GO:0030165]
[55]	Q8N3C0	Activating signal cointegrator 1 complex subunit 3 (EC 3.6.4.12) (ASC-1 complex subunit p200) (ASC1p200) (Helicase, ATP binding 1) (Trip4 complex subunit p200)	ATP binding [GO:0005524]; ATP-dependent 3'-5' DNA helicase activity [GO:0043140]; poly(A) RNA binding [GO:0044822]
[56]	O94762	ATP-dependent DNA helicase Q5 (EC 3.6.4.12) (DNA helicase, RecQ-like type 5) (RecQ5) (RecQ protein-like 5)	ATP binding [GO:0005524]; ATP-dependent helicase activity [GO:0008026]; DNA helicase activity [GO:0003678]; nucleic acid binding [GO:0003676]; RNA polymerase II core binding [GO:0000993]
[57]	P43250	G protein-coupled receptor kinase 6 (EC 2.7.11.16) (G protein-coupled receptor kinase GRK6)	ATP binding [GO:0005524]; beta-adrenergic receptor kinase activity [GO:0047696]; G-protein coupled receptor kinase activity [GO:0004703]
[58]	P34947	G protein-coupled receptor kinase 5 (EC 2.7.11.16) (G protein-coupled receptor kinase GRK5)	ATP binding [GO:0005524]; beta-adrenergic receptor kinase activity [GO:0047696]; G-protein coupled receptor kinase activity [GO:0004703]; phospholipid binding [GO:0005543]; protein kinase C binding [GO:0005080]; protein serine/threonine kinase activity [GO:0004674]
[59]	P35626	Beta-adrenergic receptor kinase 2 (Beta-ARK-2) (EC 2.7.11.15) (G-protein-coupled receptor kinase 3)	ATP binding [GO:0005524]; beta-adrenergic receptor kinase activity [GO:0047696]; G-protein coupled receptor kinase activity [GO:0004703]; protein kinase activity [GO:0004672]
[60]	P49841	Glycogen synthase kinase-3 beta (GSK-3 beta) (EC 2.7.11.26) (Serine/threonine-protein kinase GSK3B) (EC 2.7.11.1)	ATP binding [GO:0005524]; beta-catenin binding [GO:0008013]; kinase activity [GO:0016301]; NF-kappaB binding [GO:0051059]; p53 binding [GO:0002039]; protein kinase A catalytic subunit binding [GO:0034236]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase II transcription factor binding [GO:0001085]; tau-protein kinase activity [GO:0050321]; ubiquitin protein ligase binding [GO:0031625]
[61]	Q02779	Mitogen-activated protein kinase kinase kinase 10 (EC 2.7.11.25) (Mixed lineage kinase 2) (Protein kinase MST)	ATP binding [GO:0005524]; bHLH transcription factor binding [GO:0043425]; JUN kinase kinase activity [GO:0004706]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; transcription corepressor activity [GO:0003714]
[62]	O95342	Bile salt export pump (ATP-binding cassette sub-family B member 11)	ATP binding [GO:0005524]; bile acid-exporting ATPase activity [GO:0015432]; canalicular bile acid transmembrane transporter activity [GO:0015126]; sodium-exporting ATPase activity, phosphorylative mechanism [GO:0008554]; transporter activity [GO:0005215]
[63]	Q13976	cGMP-dependent protein kinase 1 (cGK 1) (cGK1) (EC 2.7.11.12) (cGMP-dependent protein kinase I) (cGKI)	ATP binding [GO:0005524]; calcium channel regulator activity [GO:0005246]; cGMP binding [GO:0030553]; cGMP-dependent protein kinase activity [GO:0004692]
[64]	Q96BR1	Serine/threonine-protein kinase Sgk3 (EC 2.7.11.1) (Cytokine-independent survival kinase) (Serum/glucocorticoid-regulated kinase 3) (Serum/glucocorticoid-regulated kinase-like)	ATP binding [GO:0005524]; calcium channel regulator activity [GO:0005246]; chloride channel regulator activity [GO:0017081]; phosphatidylinositol binding [GO:0035091]; potassium channel regulator activity

			[GO:0015459]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; sodium channel regulator activity [GO:0017080]
[65]	Q9HBY8	Serine/threonine-protein kinase Sgk2 (EC 2.7.11.1) (Serum/glucocorticoid-regulated kinase 2)	ATP binding [GO:0005524]; calcium channel regulator activity [GO:0005246]; chloride channel regulator activity [GO:0017081]; potassium channel regulator activity [GO:0015459]; protein serine/threonine kinase activity [GO:0004674]; sodium channel regulator activity [GO:0017080]
[66]	O00141	Serine/threonine-protein kinase Sgk1 (EC 2.7.11.1) (Serum/glucocorticoid-regulated kinase 1)	ATP binding [GO:0005524]; calcium channel regulator activity [GO:0005246]; chloride channel regulator activity [GO:0017081]; potassium channel regulator activity [GO:0015459]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; sodium channel regulator activity [GO:0017080]
[67]	Q96RR4	Calcium/calmodulin-dependent protein kinase kinase 2 (CaM-KK 2) (CaM-kinase kinase 2) (CaMKK 2) (EC 2.7.11.17) (Calcium/calmodulin-dependent protein kinase kinase beta) (CaM-KK beta) (CaM-kinase kinase beta) (CaMKK beta)	ATP binding [GO:0005524]; calcium ion binding [GO:0005509]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; protein tyrosine kinase activity [GO:0004713]
[68]	P15056	Serine/threonine-protein kinase B-raf (EC 2.7.11.1) (Proto-oncogene B-Raf) (p94) (v-Raf murine sarcoma viral oncogene homolog B1)	ATP binding [GO:0005524]; calcium ion binding [GO:0005509]; identical protein binding [GO:0042802]; MAP kinase kinase kinase activity [GO:0004709]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[69]	Q14680	Maternal embryonic leucine zipper kinase (hMELK) (EC 2.7.11.1) (Protein kinase Eg3) (pEg3 kinase) (Protein kinase PK38) (hPK38) (Tyrosine-protein kinase MELK) (EC 2.7.10.2)	ATP binding [GO:0005524]; calcium ion binding [GO:0005509]; lipid binding [GO:0008289]; non-membrane spanning protein tyrosine kinase activity [GO:0004715]; protein serine/threonine kinase activity [GO:0004674]
[70]	P17252	Protein kinase C alpha type (PKC-A) (PKC-alpha) (EC 2.7.11.13)	ATP binding [GO:0005524]; calcium-dependent protein kinase C activity [GO:0004698]; enzyme binding [GO:0019899]; histone kinase activity (H3-T6 specific) [GO:0035403]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]; zinc ion binding [GO:0008270]
[71]	P05129	Protein kinase C gamma type (PKC-gamma) (EC 2.7.11.13)	ATP binding [GO:0005524]; calcium-dependent protein kinase C activity [GO:0004698]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; zinc ion binding [GO:0008270]
[72]	Q16566	Calcium/calmodulin-dependent protein kinase type IV (CaMK IV) (EC 2.7.11.17) (CaM kinase-GR)	ATP binding [GO:0005524]; calcium-dependent protein serine/threonine kinase activity [GO:0009931]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]
[73]	Q8IW41	MAP kinase-activated protein kinase 5 (MAPK-activated protein kinase 5) (MAPKAP kinase 5) (MAPKAP-K5) (MAPKAPK-5) (MK-5) (MK5) (EC 2.7.11.1) (p38-regulated/activated protein kinase) (PRAK)	ATP binding [GO:0005524]; calcium-dependent protein serine/threonine kinase activity [GO:0009931]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; MAP kinase kinase activity [GO:0004708]; mitogen-activated protein kinase binding [GO:0051019]; p53 binding [GO:0002039]; protein serine/threonine kinase activity [GO:0004674]; signal transducer activity

			[GO:0004871]
[74]	Q16644	MAP kinase-activated protein kinase 3 (MAPK-activated protein kinase 3) (MAPKAP kinase 3) (MAPKAP-K3) (MAPKAPK-3) (MK-3) (EC 2.7.11.1) (Chromosome 3p kinase) (3pK)	ATP binding [GO:0005524]; calcium-dependent protein serine/threonine kinase activity [GO:0009931]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; MAP kinase kinase activity [GO:0004708]; mitogen-activated protein kinase binding [GO:0051019]; protein serine/threonine kinase activity [GO:0004674]; signal transducer activity [GO:0004871]
[75]	Q9HBH9	MAP kinase-interacting serine/threonine-protein kinase 2 (EC 2.7.11.1) (MAP kinase signal-integrating kinase 2) (MAPK signal-integrating kinase 2) (Mnk2)	ATP binding [GO:0005524]; calcium-dependent protein serine/threonine kinase activity [GO:0009931]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[76]	Q13555	Calcium/calmodulin-dependent protein kinase type II subunit gamma (CaM kinase II subunit gamma) (CaMK-II subunit gamma) (EC 2.7.11.17)	ATP binding [GO:0005524]; calcium-dependent protein serine/threonine phosphatase activity [GO:0004723]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; protein homodimerization activity [GO:0042803]
[77]	Q05655	Protein kinase C delta type (EC 2.7.11.13) (Tyrosine-protein kinase PRKCD) (EC 2.7.10.2) (nPKC-delta) [Cleaved into: Protein kinase C delta type regulatory subunit; Protein kinase C delta type catalytic subunit (Sphingosine-dependent protein kinase-1) (SDK1)]	ATP binding [GO:0005524]; calcium-independent protein kinase C activity [GO:0004699]; enzyme activator activity [GO:0008047]; enzyme binding [GO:0019899]; insulin receptor substrate binding [GO:0043560]; metal ion binding [GO:0046872]; non-membrane spanning protein tyrosine kinase activity [GO:0004715]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]
[78]	P24723	Protein kinase C eta type (EC 2.7.11.13) (PKC-L) (nPKC-eta)	ATP binding [GO:0005524]; calcium-independent protein kinase C activity [GO:0004699]; enzyme binding [GO:0019899]; metal ion binding [GO:0046872]; protein kinase C activity [GO:0004697]
[79]	Q9UQM7	Calcium/calmodulin-dependent protein kinase type II subunit alpha (CaM kinase II subunit alpha) (CaMK-II subunit alpha) (EC 2.7.11.17)	ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; glutamate receptor binding [GO:0035254]; kinase activity [GO:0016301]; protein homodimerization activity [GO:0042803]; protein serine/threonine kinase activity [GO:0004674]
[80]	P53355	Death-associated protein kinase 1 (DAP kinase 1) (EC 2.7.11.1)	ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; GTP binding [GO:0005525]; identical protein binding [GO:0042802]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; syntaxin-1 binding [GO:0017075]
[81]	Q9UIK4	Death-associated protein kinase 2 (DAP kinase 2) (EC 2.7.11.1) (DAP-kinase-related protein 1) (DRP-1)	ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; identical protein binding [GO:0042802]; protein serine/threonine kinase activity [GO:0004674]
[82]	Q13557	Calcium/calmodulin-dependent protein kinase type II subunit delta (CaM kinase II subunit delta) (CaMK-II subunit delta) (EC 2.7.11.17)	ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; ion channel binding [GO:0044325]; protein homodimerization activity

			[GO:0042803]; protein serine/threonine kinase activity [GO:0004674]; sodium channel inhibitor activity [GO:0019871]; titin binding [GO:0031432]
[83]	Q9H1R3	Myosin light chain kinase 2, skeletal/cardiac muscle (MLCK2) (EC 2.7.11.18)	ATP binding [GO:0005524]; calmodulin binding [GO:0005516]; calmodulin-dependent protein kinase activity [GO:0004683]; myosin light chain kinase activity [GO:0004687]
[84]	Q8N5S9	Calcium/calmodulin-dependent protein kinase kinase 1 (CaM-KK 1) (CaM-kinase kinase 1) (CaMKK 1) (EC 2.7.11.17) (CaM-kinase IV kinase) (Calcium/calmodulin-dependent protein kinase kinase alpha) (CaM-KK alpha) (CaM-kinase kinase alpha) (CaMKK alpha)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]
[85]	Q14012	Calcium/calmodulin-dependent protein kinase type 1 (EC 2.7.11.17) (CaM kinase I) (CaM-KI) (CaM kinase I alpha) (CaMKI-alpha)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]
[86]	Q6P2M8	Calcium/calmodulin-dependent protein kinase type 1B (EC 2.7.11.17) (CaM kinase I beta) (CaM kinase IB) (CaM-KI beta) (CaMKI-beta) (Pregnancy up-regulated non-ubiquitously-expressed CaM kinase)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]
[87]	Q8IU85	Calcium/calmodulin-dependent protein kinase type 1D (EC 2.7.11.17) (CaM kinase I delta) (CaM kinase ID) (CaM-KI delta) (CaMKI delta) (CaMKID) (CaMKI-like protein kinase) (CKLiK)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]
[88]	Q96NX5	Calcium/calmodulin-dependent protein kinase type 1G (EC 2.7.11.17) (CaM kinase I gamma) (CaM kinase IG) (CaM-KI gamma) (CaMKI gamma) (CaMKIG) (CaMK-like CREB kinase III) (CLICK III)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]
[89]	O43293	Death-associated protein kinase 3 (DAP kinase 3) (EC 2.7.11.1) (DAP-like kinase) (Dlk) (MYPT1 kinase) (Zipper-interacting protein kinase) (ZIP-kinase)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]; cAMP response element binding protein binding [GO:0008140]; identical protein binding [GO:0042802]; leucine zipper domain binding [GO:0043522]; protein homodimerization activity [GO:0042803]; protein serine/threonine kinase activity [GO:0004674]; Rho GTPase binding [GO:0017048]
[90]	Q15746	Myosin light chain kinase, smooth muscle (MLCK) (smMLCK) (EC 2.7.11.18) (Kinase-related protein) (KRP) (Telokin) [Cleaved into: Myosin light chain kinase, smooth muscle, deglutamylated form]	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]; metal ion binding [GO:0046872]; myosin light chain kinase activity [GO:0004687]
[91]	Q32MK0	Myosin light chain kinase 3 (EC 2.7.11.18) (Cardiac-MyBP-C-associated Ca/CaM kinase) (Cardiac-MLCK)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]; myosin light chain kinase activity [GO:0004687]
[92]	Q13554	Calcium/calmodulin-dependent protein kinase type II subunit beta (CaM kinase II subunit beta) (CaMK-II subunit beta) (EC 2.7.11.17)	ATP binding [GO:0005524]; calmodulin-dependent protein kinase activity [GO:0004683]; protein homodimerization activity [GO:0042803]
[93]	P22612	cAMP-dependent protein kinase catalytic subunit gamma (PKA C-gamma) (EC 2.7.11.11)	ATP binding [GO:0005524]; cAMP-dependent protein kinase activity [GO:0004691]
[94]	P51817	cAMP-dependent protein kinase catalytic subunit PRKX (PrKX) (Protein kinase X) (Protein kinase X-linked) (Serine/threonine-protein kinase PRKX) (EC 2.7.11.1) (Protein kinase PKX1)	ATP binding [GO:0005524]; cAMP-dependent protein kinase activity [GO:0004691]
[95]	P22694	cAMP-dependent protein kinase catalytic subunit beta (PKA C-beta) (EC 2.7.11.11)	ATP binding [GO:0005524]; cAMP-dependent protein kinase activity [GO:0004691]; magnesium ion binding [GO:0000287]; ubiquitin protein ligase binding [GO:0031625]
[96]	P17612	cAMP-dependent protein kinase catalytic subunit	ATP binding [GO:0005524]; cAMP-dependent

		alpha (PKA C-alpha) (EC 2.7.11.11)	protein kinase activity [GO:0004691]; protein kinase A regulatory subunit binding [GO:0034237]; protein kinase binding [GO:0019901]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; ubiquitin protein ligase binding [GO:0031625]
[97]	P43246	DNA mismatch repair protein Msh2 (hMSH2) (MutS protein homolog 2)	ATP binding [GO:0005524]; centromeric DNA binding [GO:0019237]; damaged DNA binding [GO:0003684]; DNA binding [GO:0003677]; DNA-dependent ATPase activity [GO:0008094]; double-strand/single-strand DNA junction binding [GO:0000406]; enzyme binding [GO:0019899]; guanine/thymine mispair binding [GO:0032137]; heteroduplex DNA loop binding [GO:0000404]; protein C-terminus binding [GO:0008022]; protein homodimerization activity [GO:0042803]; protein kinase binding [GO:0019901]; Y-form DNA binding [GO:0000403]
[98]	P20585	DNA mismatch repair protein Msh3 (hMSH3) (Divergent upstream protein) (DUP) (Mismatch repair protein 1) (MRP1)	ATP binding [GO:0005524]; centromeric DNA binding [GO:0019237]; damaged DNA binding [GO:0003684]; DNA-dependent ATPase activity [GO:0008094]; double-strand/single-strand DNA junction binding [GO:0000406]; enzyme binding [GO:0019899]; heteroduplex DNA loop binding [GO:0000404]; Y-form DNA binding [GO:0000403]
[99]	Q13237	cGMP-dependent protein kinase 2 (cGK 2) (cGK2) (EC 2.7.11.12) (cGMP-dependent protein kinase II) (cGKII)	ATP binding [GO:0005524]; cGMP binding [GO:0030553]; cGMP-dependent protein kinase activity [GO:0004692]; protein kinase activity [GO:0004672]
[100]	Q9H4A3	Serine/threonine-protein kinase WNK1 (EC 2.7.11.1) (Erythrocyte 65 kDa protein) (p65) (Kinase deficient protein) (Protein kinase lysine-deficient 1) (Protein kinase with no lysine 1) (hWNK1)	ATP binding [GO:0005524]; chloride channel inhibitor activity [GO:0019869]; phosphatase binding [GO:0019902]; protein kinase inhibitor activity [GO:0004860]; protein serine/threonine kinase activity [GO:0004674]
[101]	Q9BYP7	Serine/threonine-protein kinase WNK3 (EC 2.7.11.1) (Protein kinase lysine-deficient 3) (Protein kinase with no lysine 3)	ATP binding [GO:0005524]; chloride channel inhibitor activity [GO:0019869]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[102]	Q96J92	Serine/threonine-protein kinase WNK4 (EC 2.7.11.1) (Protein kinase lysine-deficient 4) (Protein kinase with no lysine 4)	ATP binding [GO:0005524]; chloride channel inhibitor activity [GO:0019869]; protein serine/threonine kinase activity [GO:0004674]
[103]	Q8IYD8	Fanconi anemia group M protein (Protein FACM) (EC 3.6.4.13) (ATP-dependent RNA helicase FANCM) (Fanconi anemia-associated polypeptide of 250 kDa) (FAAP250) (Protein Hef ortholog)	ATP binding [GO:0005524]; chromatin binding [GO:0003682]; DNA binding [GO:0003677]; helicase activity [GO:0004386]; nuclease activity [GO:0004518]
[104]	Q13153	Serine/threonine-protein kinase PAK 1 (EC 2.7.11.1) (Alpha-PAK) (p21-activated kinase 1) (PAK-1) (p65-PAK)	ATP binding [GO:0005524]; collagen binding [GO:0005518]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[105]	O95819	Mitogen-activated protein kinase kinase kinase 4 (EC 2.7.11.1) (HPK/GCK-like kinase HGK) (MAPK/ERK kinase kinase kinase 4) (MEK kinase kinase 4) (MEKKK 4) (Nck-interacting kinase)	ATP binding [GO:0005524]; creatine kinase activity [GO:0004111]; protein serine/threonine kinase activity [GO:0004674]
[106]	O94921	Cyclin-dependent kinase 14 (EC 2.7.11.22) (Cell division protein kinase 14) (Serine/threonine-protein kinase PFTAIRES-1) (hPFTAIRES1)	ATP binding [GO:0005524]; cyclin binding [GO:0030332]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[107]	Q00534	Cyclin-dependent kinase 6 (EC 2.7.11.22) (Cell division protein kinase 6) (Serine/threonine-protein kinase PLSTIRE)	ATP binding [GO:0005524]; cyclin binding [GO:0030332]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]



[108]	P11802	Cyclin-dependent kinase 4 (EC 2.7.11.22) (Cell division protein kinase 4) (PSK-J3)	ATP binding [GO:0005524]; cyclin binding [GO:0030332]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; cyclin-dependent protein serine/threonine kinase regulator activity [GO:0016538]
[109]	P24941	Cyclin-dependent kinase 2 (EC 2.7.11.22) (Cell division protein kinase 2) (p33 protein kinase)	ATP binding [GO:0005524]; cyclin binding [GO:0030332]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; metal ion binding [GO:0046872]
[110]	Q14004	Cyclin-dependent kinase 13 (EC 2.7.11.22) (EC 2.7.11.23) (CDC2-related protein kinase 5) (Cell division cycle 2-like protein kinase 5) (Cell division protein kinase 13) (hCDK13) (Cholinesterase-related cell division controller)	ATP binding [GO:0005524]; cyclin binding [GO:0030332]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; poly(A) RNA binding [GO:0044822]; protein kinase activity [GO:0004672]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]
[111]	Q15131	Cyclin-dependent kinase 10 (EC 2.7.11.22) (Cell division protein kinase 10) (Serine/threonine-protein kinase PISSLRE)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[112]	Q07002	Cyclin-dependent kinase 18 (EC 2.7.11.22) (Cell division protein kinase 18) (PCTAIRE-motif protein kinase 3) (Serine/threonine-protein kinase PCTAIRE-3)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[113]	Q8IZL9	Cyclin-dependent kinase 20 (EC 2.7.11.22) (CDK-activating kinase p42) (CAK-kinase p42) (Cell cycle-related kinase) (Cell division protein kinase 20) (Cyclin-dependent protein kinase H) (Cyclin-kinase-activating kinase p42)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[114]	Q00526	Cyclin-dependent kinase 3 (EC 2.7.11.22) (Cell division protein kinase 3)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[115]	Q00532	Cyclin-dependent kinase-like 1 (EC 2.7.11.22) (Protein kinase p42 KKIALRE) (Serine/threonine-protein kinase KKIALRE)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[116]	Q5MAI5	Cyclin-dependent kinase-like 4 (EC 2.7.11.22)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]
[117]	O76039	Cyclin-dependent kinase-like 5 (EC 2.7.11.22) (Serine/threonine-protein kinase 9)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; kinase activity [GO:0016301]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[118]	Q96Q40	Cyclin-dependent kinase 15 (EC 2.7.11.22) (Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 7 protein) (Cell division protein kinase 15) (Serine/threonine-protein kinase ALS2CR7) (Serine/threonine-protein kinase PFTAIRE-2)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[119]	P21127	Cyclin-dependent kinase 11B (EC 2.7.11.22) (Cell division cycle 2-like protein kinase 1) (CLK-1) (Cell division protein kinase 11B) (Galactosyltransferase-associated protein kinase p58/GTA) (PITSLRE serine/threonine-protein kinase CDC2L1) (p58 CLK-1)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; poly(A) RNA binding [GO:0044822]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[120]	Q00537	Cyclin-dependent kinase 17 (EC 2.7.11.22) (Cell division protein kinase 17) (PCTAIRE-motif protein kinase 2) (Serine/threonine-protein kinase PCTAIRE-2)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]
[121]	Q92772	Cyclin-dependent kinase-like 2 (EC 2.7.11.22) (Protein kinase p56 KKIAMRE) (Serine/threonine-protein kinase KKIAMRE)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity

			[GO:0004672]
[122]	Q9UQ88	Cyclin-dependent kinase 11A (EC 2.7.11.22) (Cell division cycle 2-like protein kinase 2) (Cell division protein kinase 11A) (Galactosyltransferase-associated protein kinase p58/GTA) (PITSLRE serine/threonine-protein kinase CDC2L2)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[123]	Q9UQ07	MAPK/MAK/MRK overlapping kinase (EC 2.7.11.22) (MOK protein kinase) (Renal tumor antigen 1) (RAGE-1)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[124]	P06493	Cyclin-dependent kinase 1 (CDK1) (EC 2.7.11.22) (EC 2.7.11.23) (Cell division control protein 2 homolog) (Cell division protein kinase 1) (p34 protein kinase)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]
[125]	P49336	Cyclin-dependent kinase 8 (EC 2.7.11.22) (EC 2.7.11.23) (Cell division protein kinase 8) (Mediator complex subunit CDK8) (Mediator of RNA polymerase II transcription subunit CDK8) (Protein kinase K35)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]; ubiquitin protein ligase activity [GO:0061630]
[126]	P20794	Serine/threonine-protein kinase MAK (EC 2.7.11.22) (Male germ cell-associated kinase)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein kinase activity [GO:0004672]; transcription coactivator activity [GO:0003713]
[127]	Q00536	Cyclin-dependent kinase 16 (EC 2.7.11.22) (Cell division protein kinase 16) (PCTAIRE-motif protein kinase 1) (Serine/threonine-protein kinase PCTAIRE-1)	ATP binding [GO:0005524]; cyclin-dependent protein serine/threonine kinase activity [GO:0004693]; protein serine/threonine kinase activity [GO:0004674]
[128]	P45984	Mitogen-activated protein kinase 9 (MAP kinase 9) (MAPK 9) (EC 2.7.11.24) (JNK-55) (Stress-activated protein kinase 1a) (SAPK1a) (Stress-activated protein kinase JNK2) (c-Jun N-terminal kinase 2)	ATP binding [GO:0005524]; cysteine-type endopeptidase activator activity involved in apoptotic process [GO:0008656]; JUN kinase activity [GO:0004705]; transcription factor binding [GO:0008134]
[129]	P51812	Ribosomal protein S6 kinase alpha-3 (S6K-alpha-3) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 3) (p90-RSK 3) (p90RSK3) (Insulin-stimulated protein kinase 1) (ISPK-1) (MAP kinase-activated protein kinase 1b) (MAPK-activated protein kinase 1b) (MAPKAP kinase 1b) (MAPKAPK-1b) (Ribosomal S6 kinase 2) (RSK-2) (pp90RSK2)	ATP binding [GO:0005524]; cysteine-type endopeptidase inhibitor activity involved in apoptotic process [GO:0043027]; magnesium ion binding [GO:0000287]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; ribosomal protein S6 kinase activity [GO:0004711]
[130]	Q15418	Ribosomal protein S6 kinase alpha-1 (S6K-alpha-1) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 1) (p90-RSK 1) (p90RSK1) (p90S6K) (MAP kinase-activated protein kinase 1a) (MAPK-activated protein kinase 1a) (MAPKAP kinase 1a) (MAPKAPK-1a) (Ribosomal S6 kinase 1) (RSK-1)	ATP binding [GO:0005524]; cysteine-type endopeptidase inhibitor activity involved in apoptotic process [GO:0043027]; magnesium ion binding [GO:0000287]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; ribosomal protein S6 kinase activity [GO:0004711]
[131]	Q13546	Receptor-interacting serine/threonine-protein kinase 1 (EC 2.7.11.1) (Cell death protein RIP) (Receptor-interacting protein 1) (RIP-1) (Serine/threonine-protein kinase RIP)	ATP binding [GO:0005524]; death domain binding [GO:0070513]; death receptor binding [GO:0005123]; identical protein binding [GO:0042802]; protein complex binding [GO:0032403]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; ubiquitin protein ligase

			binding [GO:0031625]
[132]	O15457	MutS protein homolog 4 (hMSH4)	ATP binding [GO:0005524]; DNA binding [GO:0003677]; DNA-dependent ATPase activity [GO:0008094]; mismatched DNA binding [GO:0030983]
[133]	P28482	Mitogen-activated protein kinase 1 (MAP kinase 1) (MAPK 1) (EC 2.7.11.24) (ERT1) (Extracellular signal-regulated kinase 2) (ERK-2) (MAP kinase isoform p42) (p42-MAPK) (Mitogen-activated protein kinase 2) (MAP kinase 2) (MAPK 2)	ATP binding [GO:0005524]; DNA binding [GO:0003677]; MAP kinase activity [GO:0004707]; phosphatase binding [GO:0019902]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase II carboxy-terminal domain kinase activity [GO:0008353]
[134]	Q9NP58	ATP-binding cassette sub-family B member 6, mitochondrial (Mitochondrial ABC transporter 3) (Mt-ABC transporter 3) (P-glycoprotein-related protein) (Ubiquitously-expressed mammalian ABC half transporter)	ATP binding [GO:0005524]; efflux transmembrane transporter activity [GO:0015562]; heme binding [GO:0020037]; heme transporter activity [GO:0015232]; heme-transporting ATPase activity [GO:0015439]
[135]	O14733	Dual specificity mitogen-activated protein kinase kinase 7 (MAP kinase kinase 7) (MAPKK 7) (EC 2.7.12.2) (JNK-activating kinase 2) (MAPK/ERK kinase 7) (MEK 7) (Stress-activated protein kinase kinase 4) (SAPK kinase 4) (SAPKK-4) (SAPKK4) (c-Jun N-terminal kinase kinase 2) (JNK kinase 2) (JNKK 2)	ATP binding [GO:0005524]; enzyme binding [GO:0019899]; JUN kinase kinase activity [GO:0008545]; magnesium ion binding [GO:0000287]; MAP kinase kinase activity [GO:0004708]; protein kinase binding [GO:0019901]; protein phosphatase binding [GO:0019903]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[136]	Q16539	Mitogen-activated protein kinase 14 (MAP kinase 14) (MAPK 14) (EC 2.7.11.24) (Cytokine suppressive anti-inflammatory drug-binding protein) (CSAID-binding protein) (CSBP) (MAP kinase MXI2) (MAX-interacting protein 2) (Mitogen-activated protein kinase p38 alpha) (MAP kinase p38 alpha) (Stress-activated protein kinase 2a) (SAPK2a)	ATP binding [GO:0005524]; enzyme binding [GO:0019899]; MAP kinase activity [GO:0004707]; MAP kinase kinase activity [GO:0004708]; NFAT protein binding [GO:0051525]; protein serine/threonine kinase activity [GO:0004674]
[137]	Q15835	Rhodopsin kinase (RK) (EC 2.7.11.14) (G protein-coupled receptor kinase 1)	ATP binding [GO:0005524]; G-protein coupled receptor kinase activity [GO:0004703]; protein kinase activity [GO:0004672]; rhodopsin kinase activity [GO:0050254]
[138]	P32298	G protein-coupled receptor kinase 4 (EC 2.7.11.16) (G protein-coupled receptor kinase GRK4) (ITI1)	ATP binding [GO:0005524]; G-protein coupled receptor kinase activity [GO:0004703]; rhodopsin kinase activity [GO:0050254]
[139]	Q8WTQ7	G protein-coupled receptor kinase 7 (EC 2.7.11.14) (EC 2.7.11.16) (G protein-coupled receptor kinase GRK7)	ATP binding [GO:0005524]; G-protein coupled receptor kinase activity [GO:0004703]; rhodopsin kinase activity [GO:0050254]
[140]	Q96L34	MAP/microtubule affinity-regulating kinase 4 (EC 2.7.11.1) (MAP/microtubule affinity-regulating kinase-like 1)	ATP binding [GO:0005524]; gamma-tubulin binding [GO:0043015]; microtubule binding [GO:0008017]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]; ubiquitin binding [GO:0043130]
[141]	Q9UII7	GTP:AMP phosphotransferase AK3, mitochondrial (EC 2.7.4.10) (Adenylate kinase 3) (AK 3) (Adenylate kinase 3 alpha-like 1)	ATP binding [GO:0005524]; GTP binding [GO:0005525]; nucleoside triphosphate adenylate kinase activity [GO:0046899]
[142]	O60229	Kalirin (EC 2.7.11.1) (Huntingtin-associated protein-interacting protein) (Protein Duo) (Serine/threonine-protein kinase with Dbp- and pleckstrin homology domain)	ATP binding [GO:0005524]; guanyl-nucleotide exchange factor activity [GO:0005085]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]; Rho guanyl-nucleotide exchange factor activity [GO:0005089]
[143]	O75962	Triple functional domain protein (EC 2.7.11.1) (PTPRF-interacting protein)	ATP binding [GO:0005524]; guanyl-nucleotide exchange factor activity [GO:0005085]; protein serine/threonine kinase activity [GO:0004674]; Rho guanyl-nucleotide exchange factor activity [GO:0005089]

[144]	O14936	Peripheral plasma membrane protein CASK (hCASK) (EC 2.7.11.1) (Calcium/calmodulin-dependent serine protein kinase) (Protein lin-2 homolog)	ATP binding [GO:0005524]; guanylate kinase activity [GO:0004385]; protein serine/threonine kinase activity [GO:0004674]
[145]	Q16513	Serine/threonine-protein kinase N2 (EC 2.7.11.13) (PKN gamma) (Protein kinase C-like 2) (Protein-kinase C-related kinase 2)	ATP binding [GO:0005524]; histone deacetylase binding [GO:0042826]; kinase activity [GO:0016301]; poly(A) RNA binding [GO:0044822]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase binding [GO:0070063]
[146]	O75676	Ribosomal protein S6 kinase alpha-4 (S6K-alpha-4) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 4) (Nuclear mitogen- and stress-activated protein kinase 2) (Ribosomal protein kinase B) (RSKB)	ATP binding [GO:0005524]; histone kinase activity (H3-S10 specific) [GO:0035175]; magnesium ion binding [GO:0000287]; mitogen-activated protein kinase p38 binding [GO:0048273]; protein serine/threonine kinase activity [GO:0004674]; ribosomal protein S6 kinase activity [GO:0004711]
[147]	O14757	Serine/threonine-protein kinase Chk1 (EC 2.7.11.1) (CHK1 checkpoint homolog) (Cell cycle checkpoint kinase) (Checkpoint kinase-1)	ATP binding [GO:0005524]; histone kinase activity (H3-T11 specific) [GO:0035402]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[148]	O14965	Aurora kinase A (EC 2.7.11.1) (Aurora 2) (Aurora/IPL1-related kinase 1) (ARK-1) (Aurora-related kinase 1) (hARK1) (Breast tumor-amplified kinase) (Serine/threonine-protein kinase 15) (Serine/threonine-protein kinase 6) (Serine/threonine-protein kinase aurora-A)	ATP binding [GO:0005524]; histone serine kinase activity [GO:0035174]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]
[149]	Q9UQB9	Aurora kinase C (EC 2.7.11.1) (Aurora 3) (Aurora/IPL1-related kinase 3) (ARK-3) (Aurora-related kinase 3) (Aurora/IPL1/Eg2 protein 2) (Serine/threonine-protein kinase 13) (Serine/threonine-protein kinase aurora-C)	ATP binding [GO:0005524]; histone serine kinase activity [GO:0035174]; protein kinase activity [GO:0004672]; protein serine/threonine/tyrosine kinase activity [GO:0004712]
[150]	P68400	Casein kinase II subunit alpha (CK II alpha) (EC 2.7.11.1)	ATP binding [GO:0005524]; Hsp90 protein binding [GO:0051879]; protein N-terminus binding [GO:0047485]; protein serine/threonine kinase activity [GO:0004674]
[151]	Q13043	Serine/threonine-protein kinase 4 (EC 2.7.11.1) (Mammalian STE20-like protein kinase 1) (MST-1) (STE20-like kinase MST1) (Serine/threonine-protein kinase Krs-2) [Cleaved into: Serine/threonine-protein kinase 4 37kDa subunit (MST1/N); Serine/threonine-protein kinase 4 18kDa subunit (MST1/C)]	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; magnesium ion binding [GO:0000287]; MAP kinase kinase activity [GO:0004709]; protein dimerization activity [GO:0046983]; protein homodimerization activity [GO:0042803]; protein serine/threonine kinase activator activity [GO:0043539]; protein serine/threonine kinase activity [GO:0004674]; transcription factor binding [GO:0008134]
[152]	Q9P289	Serine/threonine-protein kinase 26 (EC 2.7.11.1) (MST3 and SOK1-related kinase) (Mammalian STE20-like protein kinase 4) (MST-4) (STE20-like kinase MST4) (Serine/threonine-protein kinase MASK)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; magnesium ion binding [GO:0000287]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[153]	Q5VT25	Serine/threonine-protein kinase MRCK alpha (EC 2.7.11.1) (CDC42-binding protein kinase alpha) (DMPK-like alpha) (Myotonic dystrophy kinase-related CDC42-binding kinase alpha) (MRCK alpha) (Myotonic dystrophy protein kinase-like alpha)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[154]	P04049	RAF proto-oncogene serine/threonine-protein kinase (EC 2.7.11.1) (Proto-oncogene c-RAF) (cRaf) (Raf-1)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; MAP kinase kinase kinase activity [GO:0004709]; metal ion binding

			[GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[155]	O96017	Serine/threonine-protein kinase Chk2 (EC 2.7.11.1) (CHK2 checkpoint homolog) (Cds1 homolog) (Hucds1) (hCds1) (Checkpoint kinase 2)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; ubiquitin protein ligase binding [GO:0031625]
[156]	Q15139	Serine/threonine-protein kinase D1 (EC 2.7.11.13) (Protein kinase C mu type) (Protein kinase D) (nPKC-D1) (nPKC-mu)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; metal ion binding [GO:0046872]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]
[157]	Q9Y572	Receptor-interacting serine/threonine-protein kinase 3 (EC 2.7.11.1) (RIP-like protein kinase 3) (Receptor-interacting protein 3) (RIP-3)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; NF-kappaB-inducing kinase activity [GO:0004704]; protein complex binding [GO:0032403]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; transcription coactivator activity [GO:0003713]
[158]	O94804	Serine/threonine-protein kinase 10 (EC 2.7.11.1) (Lymphocyte-oriented kinase)	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; polo kinase kinase activity [GO:0042801]; protein homodimerization activity [GO:0042803]; protein serine/threonine kinase activity [GO:0004674]
[159]	Q13177	Serine/threonine-protein kinase PAK 2 (EC 2.7.11.1) (Gamma-PAK) (PAK65) (S6/H4 kinase) (p21-activated kinase 2) (PAK-2) (p58) [Cleaved into: PAK-2p27 (p27); PAK-2p34 (p34) (C-t-PAK2)]	ATP binding [GO:0005524]; identical protein binding [GO:0042802]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activator activity [GO:0030296]; Rac GTPase binding [GO:0048365]
[160]	O14920	Inhibitor of nuclear factor kappa-B kinase subunit beta (I-kappa-B-kinase beta) (IKK-B) (IKK-beta) (IkbKB) (EC 2.7.11.10) (I-kappa-B kinase 2) (IKK2) (Nuclear factor NF-kappa-B inhibitor kinase beta) (NFKBIB)	ATP binding [GO:0005524]; IkappaB kinase activity [GO:0008384]; protein heterodimerization activity [GO:0046982]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; scaffold protein binding [GO:0097110]
[161]	O15111	Inhibitor of nuclear factor kappa-B kinase subunit alpha (I-kappa-B kinase alpha) (IKK-A) (IKK-alpha) (IkbKA) (IkappaB kinase) (EC 2.7.11.10) (Conserved helix-loop-helix ubiquitous kinase) (I-kappa-B kinase 1) (IKK1) (Nuclear factor NF-kappa-B inhibitor kinase alpha) (NFKBIK) (Transcription factor 16) (TCF-16)	ATP binding [GO:0005524]; IkappaB kinase activity [GO:0008384]; protein heterodimerization activity [GO:0046982]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; scaffold protein binding [GO:0097110]
[162]	Q9H8X2	Inositol-pentakisphosphate 2-kinase (EC 2.7.1.158) (IPK1 homolog) (Inositol-1,3,4,5,6-pentakisphosphate 2-kinase) (Ins(1,3,4,5,6)P5 2-kinase) (InsP5 2-kinase)	ATP binding [GO:0005524]; inositol pentakisphosphate 2-kinase activity [GO:0035299]
[163]	Q05513	Protein kinase C zeta type (EC 2.7.11.13) (nPKC-zeta)	ATP binding [GO:0005524]; insulin receptor substrate binding [GO:0043560]; metal ion binding [GO:0046872]; potassium channel regulator activity [GO:0015459]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]
[164]	P45985	Dual specificity mitogen-activated protein kinase kinase 4 (MAP kinase kinase 4) (MAPKK 4) (EC	ATP binding [GO:0005524]; JUN kinase kinase activity [GO:0008545]; protein kinase activity

		2.7.12.2) (JNK-activating kinase 1) (MAPK/ERK kinase 4) (MEK 4) (SAPK/ERK kinase 1) (SEK1) (Stress-activated protein kinase kinase 1) (SAPK kinase 1) (SAPKK-1) (SAPKK1) (c-Jun N-terminal kinase kinase 1) (JNKK)	[GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[165]	Q13233	Mitogen-activated protein kinase kinase kinase 1 (EC 2.7.11.25) (MAPK/ERK kinase kinase 1) (MEK kinase 1) (MEKK 1)	ATP binding [GO:0005524]; JUN kinase kinase activity [GO:0004706]; MAP kinase kinase activity [GO:0004709]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; zinc ion binding [GO:0008270]
[166]	Q99640	Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase (EC 2.7.11.1) (Myt1 kinase)	ATP binding [GO:0005524]; kinase activity [GO:0016301]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[167]	O94806	Serine/threonine-protein kinase D3 (EC 2.7.11.13) (Protein kinase C nu type) (Protein kinase EPK2) (nPKC-nu)	ATP binding [GO:0005524]; kinase activity [GO:0016301]; metal ion binding [GO:0046872]; protein kinase C activity [GO:0004697]
[168]	Q96GX5	Serine/threonine-protein kinase greatwall (GW) (GWL) (hGWL) (EC 2.7.11.1) (Microtubule-associated serine/threonine-protein kinase-like) (MAST-L)	ATP binding [GO:0005524]; kinase activity [GO:0016301]; protein phosphatase 2A binding [GO:0051721]; protein serine/threonine kinase activity [GO:0004674]
[169]	Q9HC98	Serine/threonine-protein kinase Nek6 (EC 2.7.11.1) (Never in mitosis A-related kinase 6) (NimA-related protein kinase 6) (Protein kinase SID6-1512)	ATP binding [GO:0005524]; kinesin binding [GO:0019894]; magnesium ion binding [GO:0000287]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; signal transducer activity [GO:0004871]
[170]	Q7KZI7	Serine/threonine-protein kinase MARK2 (EC 2.7.11.1) (EC 2.7.11.26) (ELKL motif kinase 1) (EMK-1) (MAP/microtubule affinity-regulating kinase 2) (PAR1 homolog) (PAR1 homolog b) (Par-1b) (Par1b)	ATP binding [GO:0005524]; lipid binding [GO:0008289]; magnesium ion binding [GO:0000287]; poly(A) RNA binding [GO:0044822]; protein kinase activator activity [GO:0030295]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]
[171]	Q92630	Dual specificity tyrosine-phosphorylation-regulated kinase 2 (EC 2.7.12.1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; manganese ion binding [GO:0030145]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]; ubiquitin binding [GO:0043130]
[172]	Q9UBE8	Serine/threonine-protein kinase NLK (EC 2.7.11.24) (Nemo-like kinase) (Protein LAK1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; MAP kinase activity [GO:0004707]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; SH2 domain binding [GO:0042169]; transcription factor binding [GO:0008134]; ubiquitin protein ligase binding [GO:0031625]
[173]	P53778	Mitogen-activated protein kinase 12 (MAP kinase 12) (MAPK 12) (EC 2.7.11.24) (Extracellular signal-regulated kinase 6) (ERK-6) (Mitogen-activated protein kinase p38 gamma) (MAP kinase p38 gamma) (Stress-activated protein kinase 3)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; MAP kinase activity [GO:0004707]; protein serine/threonine kinase activity [GO:0004674]
[174]	O43318	Mitogen-activated protein kinase kinase kinase 7 (EC 2.7.11.25) (Transforming growth factor-beta-activated kinase 1) (TGF-beta-activated kinase 1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; MAP kinase kinase activity [GO:0004708]; MAP kinase kinase kinase activity [GO:0004709]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; scaffold protein binding [GO:0097110]
[175]	O95382	Mitogen-activated protein kinase kinase kinase 6	ATP binding [GO:0005524]; magnesium ion

		(EC 2.7.11.25) (Apoptosis signal-regulating kinase 2)	binding [GO:0000287]; MAP kinase kinase kinase activity [GO:0004709]
[176]	Q13188	Serine/threonine-protein kinase 3 (EC 2.7.11.1) (Mammalian STE20-like protein kinase 2) (MST-2) (STE20-like kinase MST2) (Serine/threonine-protein kinase Krs-1) [Cleaved into: Serine/threonine-protein kinase 3 36kDa subunit (MST2/N); Serine/threonine-protein kinase 3 20kDa subunit (MST2/C)]	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; MAP kinase kinase kinase activity [GO:0004709]; protein dimerization activity [GO:0046983]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activator activity [GO:0043539]; protein serine/threonine kinase activity [GO:0004674]
[177]	Q99683	Mitogen-activated protein kinase kinase kinase 5 (EC 2.7.11.25) (Apoptosis signal-regulating kinase 1) (ASK-1) (MAPK/ERK kinase kinase 5) (MEK kinase 5) (MEKK 5)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; MAP kinase kinase kinase activity [GO:0004709]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; protein phosphatase binding [GO:0019903]
[178]	Q6P0Q8	Microtubule-associated serine/threonine-protein kinase 2 (EC 2.7.11.1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; microtubule binding [GO:0008017]; phosphatase binding [GO:0019902]; protein serine/threonine kinase activity [GO:0004674]
[179]	Q15208	Serine/threonine-protein kinase 38 (EC 2.7.11.1) (NDR1 protein kinase) (Nuclear Dbf2-related kinase 1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; mitogen-activated protein kinase kinase kinase binding [GO:0031435]; protein serine/threonine kinase activity [GO:0004674]
[180]	P0C1S8	Wee1-like protein kinase 2 (EC 2.7.10.2) (Wee1-like protein kinase 1B) (Wee1B kinase)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; non-membrane spanning protein tyrosine kinase activity [GO:0004715]
[181]	Q15831	Serine/threonine-protein kinase STK11 (EC 2.7.11.1) (Liver kinase B1) (LKB1) (hLKB1) (Renal carcinoma antigen NY-REN-19)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; p53 binding [GO:0002039]; protein kinase activator activity [GO:0030295]; protein serine/threonine kinase activity [GO:0004674]
[182]	Q9NWZ3	Interleukin-1 receptor-associated kinase 4 (IRAK-4) (EC 2.7.11.1) (Renal carcinoma antigen NY-REN-64)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[183]	Q9Y5S2	Serine/threonine-protein kinase MRCK beta (EC 2.7.11.1) (CDC42-binding protein kinase beta) (CDC42BP-beta) (DMPK-like beta) (Myotonic dystrophy kinase-related CDC42-binding kinase beta) (MRCK beta) (Myotonic dystrophy protein kinase-like beta)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[184]	O43781	Dual specificity tyrosine-phosphorylation-regulated kinase 3 (EC 2.7.12.1) (Regulatory erythroid kinase) (REDK)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein kinase activity [GO:0004672]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[185]	Q9UK32	Ribosomal protein S6 kinase alpha-6 (S6K-alpha-6) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 6) (p90-RSK 6) (p90RSK6) (Ribosomal S6 kinase 4) (RSK-4) (pp90RSK4)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein kinase activity [GO:0004672]; ribosomal protein S6 kinase activity [GO:0004711]
[186]	O95835	Serine/threonine-protein kinase LATS1 (EC 2.7.11.1) (Large tumor suppressor homolog 1) (WARTS protein kinase) (h-warts)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]
[187]	O60307	Microtubule-associated serine/threonine-protein kinase 3 (EC 2.7.11.1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[188]	O15021	Microtubule-associated serine/threonine-protein kinase 4 (EC 2.7.11.1)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine

			kinase activity [GO:0004674]
[189]	Q9H093	NUAK family SNF1-like kinase 2 (EC 2.7.11.1) (Omphalocele kinase 2) (SNF1/AMP kinase-related kinase) (SNARK)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[190]	Q9Y2H1	Serine/threonine-protein kinase 38-like (EC 2.7.11.1) (NDR2 protein kinase) (Nuclear Dbf2-related kinase 2)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[191]	Q6DT37	Serine/threonine-protein kinase MRCK gamma (EC 2.7.11.1) (CDC42-binding protein kinase gamma) (DMPK-like gamma) (Myotonic dystrophy kinase-related CDC42-binding kinase gamma) (MRCK gamma) (MRCKG) (Myotonic dystrophy protein kinase-like gamma) (Myotonic dystrophy protein kinase-like alpha)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[192]	Q8IY84	Serine/threonine-protein kinase NIM1 (EC 2.7.11.1) (NIM1 serine/threonine-protein kinase)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[193]	Q9H0K1	Serine/threonine-protein kinase SIK2 (EC 2.7.11.1) (Qin-induced kinase) (Salt-inducible kinase 2) (SIK-2) (Serine/threonine-protein kinase SNF1-like kinase 2)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[194]	Q9Y2K2	Serine/threonine-protein kinase SIK3 (EC 2.7.11.1) (Salt-inducible kinase 3) (SIK-3) (Serine/threonine-protein kinase QSK)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[195]	Q9BXA7	Testis-specific serine/threonine-protein kinase 1 (TSK-1) (TSK1) (TSSK-1) (Testis-specific kinase 1) (EC 2.7.11.1) (Serine/threonine-protein kinase 22A)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[196]	Q96PF2	Testis-specific serine/threonine-protein kinase 2 (TSK-2) (TSK2) (TSSK-2) (Testis-specific kinase 2) (EC 2.7.11.1) (DiGeorge syndrome protein G) (DGS-G) (Serine/threonine-protein kinase 22B)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[197]	Q96PN8	Testis-specific serine/threonine-protein kinase 3 (TSK-3) (TSSK-3) (Testis-specific kinase 3) (EC 2.7.11.1) (Serine/threonine-protein kinase 22C)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[198]	Q6SA08	Testis-specific serine/threonine-protein kinase 4 (TSK-4) (TSSK-4) (Testis-specific kinase 4) (EC 2.7.11.1) (Serine/threonine-protein kinase 22E)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]
[199]	O95747	Serine/threonine-protein kinase OSR1 (EC 2.7.11.1) (Oxidative stress-responsive 1 protein)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]; receptor signaling protein serine/threonine kinase activity [GO:0004702]
[200]	Q9NRP7	Serine/threonine-protein kinase 36 (EC 2.7.11.1) (Fused homolog)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]; transcription factor binding [GO:0008134]
[201]	Q15349	Ribosomal protein S6 kinase alpha-2 (S6K-alpha-2) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 2) (p90-RSK 2) (p90RSK2) (MAP kinase-activated protein kinase 1c) (MAPK-activated protein kinase 1c) (MAPKAP kinase 1c) (MAPKAPK-1c) (Ribosomal S6 kinase 3) (RSK-3) (pp90RSK3)	ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; ribosomal protein S6 kinase activity [GO:0004711]
[202]	P27361	Mitogen-activated protein kinase 3 (MAP kinase 3) (MAPK 3) (EC 2.7.11.24) (ERT2) (Extracellular signal-regulated kinase 1) (ERK-1) (Insulin-stimulated MAP2 kinase) (MAP kinase isoform p44) (p44-MAPK) (Microtubule-associated protein 2 kinase) (p44-ERK1)	ATP binding [GO:0005524]; MAP kinase activity [GO:0004707]; phosphatase binding [GO:0019902]
[203]	Q15759	Mitogen-activated protein kinase 11 (MAP kinase 11) (MAPK 11) (EC 2.7.11.24) (Mitogen-activated	ATP binding [GO:0005524]; MAP kinase activity [GO:0004707]; protein serine/threonine kinase



		protein kinase p38 beta) (MAP kinase p38 beta) (p38b) (Stress-activated protein kinase 2b) (SAPK2b) (p38-2)	activity [GO:0004674]
[204]	O15264	Mitogen-activated protein kinase 13 (MAP kinase 13) (MAPK 13) (EC 2.7.11.24) (Mitogen-activated protein kinase p38 delta) (MAP kinase p38 delta) (Stress-activated protein kinase 4)	ATP binding [GO:0005524]; MAP kinase activity [GO:0004707]; protein serine/threonine kinase activity [GO:0004674]
[205]	Q9Y6R4	Mitogen-activated protein kinase kinase kinase 4 (EC 2.7.11.25) (MAP three kinase 1) (MAPK/ERK kinase kinase 4) (MEK kinase 4) (MEKK 4)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; MAP kinase kinase kinase activity [GO:0004709]; metal ion binding [GO:0046872]
[206]	Q99759	Mitogen-activated protein kinase kinase kinase 3 (EC 2.7.11.25) (MAPK/ERK kinase kinase 3) (MEK kinase 3) (MEKK 3)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; MAP kinase kinase kinase activity [GO:0004709]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]
[207]	Q9Y2U5	Mitogen-activated protein kinase kinase kinase 2 (EC 2.7.11.25) (MAPK/ERK kinase kinase 2) (MEK kinase 2) (MEKK 2)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; MAP kinase kinase kinase activity [GO:0004709]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]
[208]	Q99558	Mitogen-activated protein kinase kinase kinase 14 (EC 2.7.11.25) (NF-kappa-beta-inducing kinase) (HsNIK) (Serine/threonine-protein kinase NIK)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; MAP kinase kinase kinase activity [GO:0004709]; NF-kappaB-inducing kinase activity [GO:0004704]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[209]	Q13163	Dual specificity mitogen-activated protein kinase kinase 5 (MAP kinase kinase 5) (MAPKK 5) (EC 2.7.12.2) (MAPK/ERK kinase 5) (MEK 5)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[210]	O75914	Serine/threonine-protein kinase PAK 3 (EC 2.7.11.1) (Beta-PAK) (Oligophrenin-3) (p21-activated kinase 3) (PAK-3)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[211]	P36507	Dual specificity mitogen-activated protein kinase kinase 2 (MAP kinase kinase 2) (MAPKK 2) (EC 2.7.12.2) (ERK activator kinase 2) (MAPK/ERK kinase 2) (MEK 2)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; PDZ domain binding [GO:0030165]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activator activity [GO:0043539]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]; scaffold protein binding [GO:0097110]
[212]	Q02750	Dual specificity mitogen-activated protein kinase kinase 1 (MAP kinase kinase 1) (MAPKK 1) (MKK1) (EC 2.7.12.2) (ERK activator kinase 1) (MAPK/ERK kinase 1) (MEK 1)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; protein C-terminus binding [GO:0008022]; protein kinase activity [GO:0004672]; protein N-terminus binding [GO:0047485]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activator activity [GO:0043539]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]; receptor signaling protein tyrosine phosphatase activity [GO:0004728]
[213]	P46734	Dual specificity mitogen-activated protein kinase kinase 3 (MAP kinase kinase 3) (MAPKK 3) (EC	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; protein kinase binding

		2.7.12.2) (MAPK/ERK kinase 3) (MEK 3) (Stress-activated protein kinase kinase 2) (SAPK kinase 2) (SAPKK-2) (SAPKK2)	[GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[214]	P52564	Dual specificity mitogen-activated protein kinase kinase 6 (MAP kinase kinase 6) (MAPKK 6) (EC 2.7.12.2) (MAPK/ERK kinase 6) (MEK 6) (Stress-activated protein kinase kinase 3) (SAPK kinase 3) (SAPKK-3) (SAPKK3)	ATP binding [GO:0005524]; MAP kinase kinase activity [GO:0004708]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[215]	Q56UN5	Mitogen-activated protein kinase kinase kinase 19 (EC 2.7.11.1) (Regulated in COPD, protein kinase) (SPS1/STE20-related protein kinase YSK4)	ATP binding [GO:0005524]; MAP kinase kinase kinase activity [GO:0004709]
[216]	Q6ZN16	Mitogen-activated protein kinase kinase kinase 15 (EC 2.7.11.25) (Apoptosis signal-regulating kinase 3) (MAPK/ERK kinase kinase 15) (MEK kinase 15) (MEKK 15)	ATP binding [GO:0005524]; MAP kinase kinase kinase activity [GO:0004709]; metal ion binding [GO:0046872]
[217]	Q12851	Mitogen-activated protein kinase kinase kinase kinase 2 (EC 2.7.11.1) (B lymphocyte serine/threonine-protein kinase) (Germinal center kinase) (GC kinase) (MAPK/ERK kinase kinase kinase 2) (MEK kinase kinase 2) (MEKKK 2) (Rab8-interacting protein)	ATP binding [GO:0005524]; MAP kinase kinase kinase kinase activity [GO:0008349]; mitogen-activated protein kinase kinase kinase binding [GO:0031435]; protein serine/threonine kinase activity [GO:0004674]
[218]	Q92918	Mitogen-activated protein kinase kinase kinase kinase 1 (EC 2.7.11.1) (Hematopoietic progenitor kinase) (MAPK/ERK kinase kinase kinase 1) (MEK kinase kinase 1) (MEKKK 1)	ATP binding [GO:0005524]; MAP kinase kinase kinase kinase activity [GO:0008349]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[219]	P22102	Trifunctional purine biosynthetic protein adenosine-3 [Includes: Phosphoribosylamine--glycine ligase (EC 6.3.4.13) (Glycinamide ribonucleotide synthetase) (GARS) (Phosphoribosylglycinamide synthetase); Phosphoribosylformylglycinamide cyclo-ligase (EC 6.3.3.1) (AIR synthase) (AIRS) (Phosphoribosyl-aminoimidazole synthetase); Phosphoribosylglycinamide formyltransferase (EC 2.1.2.2) (5'-phosphoribosylglycinamide transformylase) (GAR transformylase) (GART)]	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; methyltransferase activity [GO:0008168]; phosphoribosylamine-glycine ligase activity [GO:0004637]; phosphoribosylformylglycinamide cyclo-ligase activity [GO:0004641]; phosphoribosylglycinamide formyltransferase activity [GO:0004644]
[220]	Q09013	Myotonin-protein kinase (MT-PK) (EC 2.7.11.1) (DM-kinase) (DMK) (DM1 protein kinase) (DMPK) (Myotonic dystrophy protein kinase)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; myosin phosphatase regulator activity [GO:0017020]; protein serine/threonine kinase activity [GO:0004674]
[221]	O14578	Citron Rho-interacting kinase (CRIK) (EC 2.7.11.1) (Serine/threonine-protein kinase 21)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; PDZ domain binding [GO:0030165]; protein serine/threonine kinase activity [GO:0004674]; scaffold protein binding [GO:0097110]
[222]	P41743	Protein kinase C iota type (EC 2.7.11.13) (Atypical protein kinase C-lambda/iota) (PRKC-lambda/iota) (aPKC-lambda/iota) (nPKC-iota)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; phospholipid binding [GO:0005543]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]
[223]	O75116	Rho-associated protein kinase 2 (EC 2.7.11.1) (Rho kinase 2) (Rho-associated, coiled-coil-containing protein kinase 2) (Rho-associated, coiled-coil-containing protein kinase II) (ROCK-II) (p164 ROCK-2)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; poly(A) RNA binding [GO:0044822]; protein serine/threonine kinase activity [GO:0004674]; Rho-dependent protein serine/threonine kinase activity [GO:0072518]; structural molecule activity [GO:0005198]
[224]	Q59H18	Serine/threonine-protein kinase TNNI3K (EC 2.7.11.1) (Cardiac ankyrin repeat kinase) (Cardiac troponin I-interacting kinase) (TNNI3-interacting kinase)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein C-terminus binding [GO:0008022]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; troponin I binding

			[GO:0031013]
[225]	O00506	Serine/threonine-protein kinase 25 (EC 2.7.11.1) (Ste20-like kinase) (Sterile 20/oxidant stress-response kinase 1) (SOK-1) (Ste20/oxidant stress response kinase 1)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[226]	Q9BZL6	Serine/threonine-protein kinase D2 (EC 2.7.11.13) (nPKC-D2)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]
[227]	P51955	Serine/threonine-protein kinase Nek2 (EC 2.7.11.1) (HSPK 21) (Never in mitosis A-related kinase 2) (NimA-related protein kinase 2) (NimA-like protein kinase 1)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein phosphatase binding [GO:0019903]; protein serine/threonine kinase activity [GO:0004674]
[228]	Q13464	Rho-associated protein kinase 1 (EC 2.7.11.1) (Renal carcinoma antigen NY-REN-35) (Rho-associated, coiled-coil-containing protein kinase 1) (Rho-associated, coiled-coil-containing protein kinase I) (ROCK-I) (p160 ROCK-1) (p160ROCK)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[229]	Q9Y6E0	Serine/threonine-protein kinase 24 (EC 2.7.11.1) (Mammalian STE20-like protein kinase 3) (MST-3) (STE20-like kinase MST3) [Cleaved into: Serine/threonine-protein kinase 24 36 kDa subunit (Mammalian STE20-like protein kinase 3 N-terminal) (MST3/N); Serine/threonine-protein kinase 24 12 kDa subunit (Mammalian STE20-like protein kinase 3 C-terminal) (MST3/C)]	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[230]	Q6ZWH5	Serine/threonine-protein kinase Nek10 (EC 2.7.11.1) (Never in mitosis A-related kinase 10) (NimA-related protein kinase 10)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[231]	Q8TD19	Serine/threonine-protein kinase Nek9 (EC 2.7.11.1) (Nercc1 kinase) (Never in mitosis A-related kinase 9) (NimA-related protein kinase 9) (NimA-related kinase 8) (Nek8)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase binding [GO:0019901]; protein serine/threonine kinase activity [GO:0004674]
[232]	Q04759	Protein kinase C theta type (EC 2.7.11.13) (nPKC-theta)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein kinase C activity [GO:0004697]; protein serine/threonine kinase activity [GO:0004674]; ubiquitin-protein transferase activity [GO:0004842]
[233]	Q8WU08	Serine/threonine-protein kinase 32A (EC 2.7.11.1) (Yet another novel kinase 1)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[234]	Q9NY57	Serine/threonine-protein kinase 32B (EC 2.7.11.1) (Yet another novel kinase 2)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[235]	Q86UX6	Serine/threonine-protein kinase 32C (EC 2.7.11.1) (PKE) (Yet another novel kinase 3)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[236]	Q9NRM7	Serine/threonine-protein kinase LATS2 (EC 2.7.11.1) (Kinase phosphorylated during mitosis protein) (Large tumor suppressor homolog 2) (Serine/threonine-protein kinase kpm) (Warts-like kinase)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[237]	Q8NG66	Serine/threonine-protein kinase Nek11 (EC 2.7.11.1) (Never in mitosis A-related kinase 11) (NimA-related protein kinase 11)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[238]	P51956	Serine/threonine-protein kinase Nek3 (EC 2.7.11.1) (HSPK 36) (Never in mitosis A-related kinase 3) (NimA-related protein kinase 3)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]

[239]	Q6P3R8	Serine/threonine-protein kinase Nek5 (EC 2.7.11.1) (Never in mitosis A-related kinase 5) (NimA-related protein kinase 5)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[240]	Q8TDX7	Serine/threonine-protein kinase Nek7 (EC 2.7.11.1) (Never in mitosis A-related kinase 7) (NimA-related protein kinase 7)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[241]	Q86SG6	Serine/threonine-protein kinase Nek8 (EC 2.7.11.1) (Never in mitosis A-related kinase 8) (NimA-related protein kinase 8) (Nima-related protein kinase 12a)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine kinase activity [GO:0004674]
[242]	Q15569	Dual specificity testis-specific protein kinase 1 (EC 2.7.12.1) (Testicular protein kinase 1)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[243]	Q9NR20	Dual specificity tyrosine-phosphorylation-regulated kinase 4 (EC 2.7.12.1)	ATP binding [GO:0005524]; metal ion binding [GO:0046872]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]
[244]	Q8WXR4	Myosin-IIIb (EC 2.7.11.1)	ATP binding [GO:0005524]; microfilament motor activity [GO:0000146]; protein serine/threonine kinase activity [GO:0004674]
[245]	Q13627	Dual specificity tyrosine-phosphorylation-regulated kinase 1A (EC 2.7.12.1) (Dual specificity YAK1-related kinase) (HP86) (Protein kinase minibrain homolog) (MNBH) (hMNB)	ATP binding [GO:0005524]; non-membrane spanning protein tyrosine kinase activity [GO:0004715]; protein kinase activity [GO:0004672]; protein self-association [GO:0043621]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; protein serine/threonine kinase activity [GO:0004674]; protein tyrosine kinase activity [GO:0004713]; tau protein binding [GO:0048156]
[246]	Q9BSD7	Cancer-related nucleoside-triphosphatase (NTPase) (EC 3.6.1.15) (Nucleoside triphosphate phosphohydrolase)	ATP binding [GO:0005524]; nucleoside-triphosphatase activity [GO:0017111]; nucleotide phosphatase activity, acting on free nucleotides [GO:0098519]; poly(A) RNA binding [GO:0044822]
[247]	Q9NP78	ATP-binding cassette sub-family B member 9 (ATP-binding cassette transporter 9) (ABC transporter 9 protein) (hABCB9) (TAP-like protein) (TAPL)	ATP binding [GO:0005524]; oligopeptide-transporting ATPase activity [GO:0015421]; peptide-transporting ATPase activity [GO:0015440]; protein homodimerization activity [GO:0042803]; substrate-specific transmembrane transporter activity [GO:0022891]
[248]	Q9H4B4	Serine/threonine-protein kinase PLK3 (EC 2.7.11.21) (Cytokine-inducible serine/threonine-protein kinase) (FGF-inducible kinase) (Polo-like kinase 3) (PLK-3) (Proliferation-related kinase)	ATP binding [GO:0005524]; p53 binding [GO:0002039]; protein serine/threonine kinase activity [GO:0004674]
[249]	Q9UBS0	Ribosomal protein S6 kinase beta-2 (S6K-beta-2) (S6K2) (EC 2.7.11.1) (70 kDa ribosomal protein S6 kinase 2) (P70S6K2) (p70-S6K 2) (S6 kinase-related kinase) (SRK) (Serine/threonine-protein kinase 14B) (p70 ribosomal S6 kinase beta) (S6K-beta) (p70 S6 kinase beta) (p70 S6K-beta) (p70 S6KB) (p70-beta)	ATP binding [GO:0005524]; peptide binding [GO:0042277]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; ribosomal protein S6 kinase activity [GO:0004711]
[250]	P23443	Ribosomal protein S6 kinase beta-1 (S6K-beta-1) (S6K1) (EC 2.7.11.1) (70 kDa ribosomal protein S6 kinase 1) (P70S6K1) (p70-S6K 1) (Ribosomal protein S6 kinase I) (Serine/threonine-protein kinase 14A) (p70 ribosomal S6 kinase alpha) (p70 S6 kinase alpha) (p70 S6K-alpha) (p70 S6KA)	ATP binding [GO:0005524]; peptide binding [GO:0042277]; protein kinase activity [GO:0004672]; protein serine/threonine/tyrosine kinase activity [GO:0004712]; ribosomal protein S6 kinase activity [GO:0004711]
[251]	Q96S38	Ribosomal protein S6 kinase delta-1 (S6K-delta-1) (EC 2.7.11.1) (52 kDa ribosomal protein S6	ATP binding [GO:0005524]; phosphatidylinositol binding [GO:0035091]; protein serine/threonine

		kinase) (Ribosomal S6 kinase-like protein with two PSK domains 118 kDa protein) (SPHK1-binding protein)	kinase activity [GO:0004674]
[252]	P15735	Phosphorylase b kinase gamma catalytic chain, liver/testis isoform (PHK-gamma-LT) (PHK-gamma-T) (EC 2.7.11.19) (PSK-C3) (Phosphorylase kinase subunit gamma-2)	ATP binding [GO:0005524]; phosphorylase kinase activity [GO:0004689]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]
[253]	Q16816	Phosphorylase b kinase gamma catalytic chain, skeletal muscle/heart isoform (PHK-gamma-M) (EC 2.7.11.19) (Phosphorylase kinase subunit gamma-1) (Serine/threonine-protein kinase PHKG1) (EC 2.7.11.1) (EC 2.7.11.26)	ATP binding [GO:0005524]; phosphorylase kinase activity [GO:0004689]; tau-protein kinase activity [GO:0050321]
[254]	O75385	Serine/threonine-protein kinase ULK1 (EC 2.7.11.1) (Autophagy-related protein 1 homolog) (ATG1) (hATG1) (Unc-51-like kinase 1)	ATP binding [GO:0005524]; protein complex binding [GO:0032403]; protein serine/threonine kinase activity [GO:0004674]; Rab GTPase binding [GO:0017137]
[255]	Q8NCB2	CaM kinase-like vesicle-associated protein	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]
[256]	Q6P5Z2	Serine/threonine-protein kinase N3 (EC 2.7.11.13) (Protein kinase PKN-beta) (Protein-kinase C-related kinase 3)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein kinase C activity [GO:0004697]
[257]	Q8N4C8	Misshapen-like kinase 1 (EC 2.7.11.1) (GCK family kinase MiNK) (MAPK/ERK kinase kinase 6) (MEK kinase kinase 6) (MEKKK 6) (Misshapen/NIK-related kinase) (Mitogen-activated protein kinase kinase kinase kinase 6)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[258]	Q9Y4K4	Mitogen-activated protein kinase kinase kinase kinase 5 (EC 2.7.11.1) (Kinase homologous to SPS1/STE20) (KHS) (MAPK/ERK kinase kinase kinase 5) (MEK kinase kinase 5) (MEKKK 5)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[259]	Q9Y243	RAC-gamma serine/threonine-protein kinase (EC 2.7.11.1) (Protein kinase Akt-3) (Protein kinase B gamma) (PKB gamma) (RAC-PK-gamma) (STK-2)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[260]	O94768	Serine/threonine-protein kinase 17B (EC 2.7.11.1) (DAP kinase-related apoptosis-inducing protein kinase 2)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]
[261]	O96013	Serine/threonine-protein kinase PAK 4 (EC 2.7.11.1) (p21-activated kinase 4) (PAK-4)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[262]	O15075	Serine/threonine-protein kinase DCLK1 (EC 2.7.11.1) (Doublecortin domain-containing protein 3A) (Doublecortin-like and CAM kinase-like 1) (Doublecortin-like kinase 1)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; receptor signaling protein activity [GO:0005057]
[263]	Q9H2X6	Homeodomain-interacting protein kinase 2 (hHIPk2) (EC 2.7.11.1)	ATP binding [GO:0005524]; protein kinase activity [GO:0004672]; protein serine/threonine kinase activity [GO:0004674]; RNA polymerase II activating transcription factor binding [GO:0001102]; RNA polymerase II transcription coactivator activity [GO:0001105]; SMAD binding [GO:0046332]; transcription corepressor activity [GO:0003714]; virion binding [GO:0046790]
[264]	P19784	Casein kinase II subunit alpha' (CK II alpha') (EC 2.7.11.1)	ATP binding [GO:0005524]; protein N-terminus binding [GO:0047485]; protein serine/threonine kinase activity [GO:0004674]
[265]	Q8NFD2	Ankyrin repeat and protein kinase domain-containing protein 1 (EC 2.7.11.1) (Protein kinase PKK2) (Sugen kinase 288) (SgK288) (X-kinase)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[266]	Q8NEV1	Casein kinase II subunit alpha 3 (CK II alpha 3) (EC 2.7.11.1) (Casein kinase II alpha 1 polypeptide pseudogene)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]

[267]	P57058	Hormonally up-regulated neu tumor-associated kinase (EC 2.7.11.1) (B19) (Serine/threonine-protein kinase MAK-V)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[268]	P27448	MAP/microtubule affinity-regulating kinase 3 (EC 2.7.11.1) (C-TAK1) (cTAK1) (Cdc25C-associated protein kinase 1) (ELKL motif kinase 2) (EMK-2) (Protein kinase STK10) (Ser/Thr protein kinase PAR-1) (Par-1a) (Serine/threonine-protein kinase p78)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[269]	Q86YV6	Myosin light chain kinase family member 4 (EC 2.7.11.1) (Sugen kinase 85) (SgK085)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[270]	Q7Z2Y5	Nik-related protein kinase (EC 2.7.11.1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[271]	Q6A1A2	Putative 3-phosphoinositide-dependent protein kinase 2 (EC 2.7.11.1) (3-phosphoinositide-dependent protein kinase 2 pseudogene)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[272]	O43930	Putative serine/threonine-protein kinase PRKY (EC 2.7.11.1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[273]	P31751	RAC-beta serine/threonine-protein kinase (EC 2.7.11.1) (Protein kinase Akt-2) (Protein kinase B beta) (PKB beta) (RAC-PK-beta)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[274]	P57078	Receptor-interacting serine/threonine-protein kinase 4 (EC 2.7.11.1) (Ankyrin repeat domain-containing protein 3) (PKC-delta-interacting protein kinase)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[275]	Q9Y6S9	Ribosomal protein S6 kinase-like 1 (EC 2.7.11.1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[276]	Q9UEE5	Serine/threonine-protein kinase 17A (EC 2.7.11.1) (DAP kinase-related apoptosis-inducing protein kinase 1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[277]	Q9BYT3	Serine/threonine-protein kinase 33 (EC 2.7.11.1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[278]	Q8N568	Serine/threonine-protein kinase DCLK2 (EC 2.7.11.1) (CaMK-like CREB regulatory kinase 2) (CL2) (CLICK-II) (CLICK2) (Doublecortin domain-containing protein 3B) (Doublecortin-like and CAM kinase-like 2) (Doublecortin-like kinase 2)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[279]	Q9C098	Serine/threonine-protein kinase DCLK3 (EC 2.7.11.1) (Doublecortin domain-containing protein 3C) (Doublecortin-like and CAM kinase-like 3) (Doublecortin-like kinase 3)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[280]	P11801	Serine/threonine-protein kinase H1 (EC 2.7.11.1) (Protein serine kinase H1) (PSK-H1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[281]	Q96QS6	Serine/threonine-protein kinase H2 (EC 2.7.11.1) (Protein serine kinase H2) (PSK-H2)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[282]	Q9P1W9	Serine/threonine-protein kinase pim-2 (EC 2.7.11.1) (Pim-2h)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[283]	Q86V86	Serine/threonine-protein kinase pim-3 (EC 2.7.11.1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[284]	O00444	Serine/threonine-protein kinase PLK4 (EC 2.7.11.21) (Polo-like kinase 4) (PLK-4) (Serine/threonine-protein kinase 18) (Serine/threonine-protein kinase Sak)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[285]	Q52WX2	Serine/threonine-protein kinase SBK1 (EC 2.7.11.1) (SH3-binding kinase 1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[286]	Q9UKI8	Serine/threonine-protein kinase tousled-like 1 (EC 2.7.11.1) (PKU-beta) (Tousled-like kinase 1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[287]	Q86UE8	Serine/threonine-protein kinase tousled-like 2 (EC 2.7.11.1) (HsHPK) (PKU-alpha) (Tousled-like kinase 2)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[288]	Q6PHR2	Serine/threonine-protein kinase ULK3 (EC	ATP binding [GO:0005524]; protein

		2.7.11.1) (Unc-51-like kinase 3)	serine/threonine kinase activity [GO:0004674]
[289]	Q9Y3S1	Serine/threonine-protein kinase WNK2 (EC 2.7.11.1) (Antigen NY-CO-43) (Protein kinase lysine-deficient 2) (Protein kinase with no lysine 2) (Serologically defined colon cancer antigen 43)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[290]	Q15772	Striated muscle preferentially expressed protein kinase (EC 2.7.11.1) (Aortic preferentially expressed protein 1) (APEG-1)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[291]	Q86TW2	Uncharacterized aarF domain-containing protein kinase 1 (EC 2.7.11.-)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[292]	Q7Z695	Uncharacterized aarF domain-containing protein kinase 2 (EC 2.7.11.-)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[293]	Q96LW2	Uncharacterized serine/threonine-protein kinase SgK494 (EC 2.7.11.1) (Sugen kinase 494)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]
[294]	Q9P286	Serine/threonine-protein kinase PAK 7 (EC 2.7.11.1) (p21-activated kinase 5) (PAK-5) (p21-activated kinase 7) (PAK-7)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]; Rac GTPase binding [GO:0048365]
[295]	Q9NYY3	Serine/threonine-protein kinase PLK2 (EC 2.7.11.21) (Polo-like kinase 2) (PLK-2) (hPlk2) (Serine/threonine-protein kinase SNK) (hSNK) (Serum-inducible kinase)	ATP binding [GO:0005524]; protein serine/threonine kinase activity [GO:0004674]; signal transducer activity [GO:0004871]
[296]	Q17RB8	LON peptidase N-terminal domain and RING finger protein 1 (RING finger protein 191)	ATP-dependent peptidase activity [GO:0004176]; zinc ion binding [GO:0008270]
[297]	Q9NUQ8	ATP-binding cassette sub-family F member 3	ATPase activity [GO:0016887]; ATP binding [GO:0005524]
[298]	Q9NTK5	Obg-like ATPase 1 (DNA damage-regulated overexpressed in cancer 45) (DOC45) (GTP-binding protein 9)	ATPase activity [GO:0016887]; ATP binding [GO:0005524]; GTP binding [GO:0005525]; metal ion binding [GO:0046872]; ribosomal large subunit binding [GO:0043023]; ribosome binding [GO:0043022]
[299]	Q9UG63	ATP-binding cassette sub-family F member 2 (Iron-inhibited ABC transporter 2)	ATPase activity [GO:0016887]; ATP binding [GO:0005524]; transporter activity [GO:0005215]
[300]	P28288	ATP-binding cassette sub-family D member 3 (70 kDa peroxisomal membrane protein) (PMP70)	ATPase activity [GO:0016887]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; long-chain fatty acid transporter activity [GO:0005324]; protein homodimerization activity [GO:0042803]
[301]	Q9BZC7	ATP-binding cassette sub-family A member 2 (ATP-binding cassette transporter 2) (ATP-binding cassette 2)	ATPase activity [GO:0016887]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; nucleotide binding [GO:0000166]
[302]	P33527	Multidrug resistance-associated protein 1 (ATP-binding cassette sub-family C member 1) (Leukotriene C(4) transporter) (LTC4 transporter)	ATPase activity [GO:0016887]; ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; transporter activity [GO:0005215]
[303]	Q8WWZ4	ATP-binding cassette sub-family A member 10	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[304]	Q8WWZ7	ATP-binding cassette sub-family A member 5	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[305]	Q8N139	ATP-binding cassette sub-family A member 6	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[306]	O94911	ATP-binding cassette sub-family A member 8	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[307]	Q8IUA7	ATP-binding cassette sub-family A member 9	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]

[308]	Q96J65	Multidrug resistance-associated protein 9 (ATP-binding cassette sub-family C member 12)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]
[309]	Q86UQ4	ATP-binding cassette sub-family A member 13	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; cholesterol transporter activity [GO:0017127]; phospholipid transporter activity [GO:0005548]
[310]	P78363	Retinal-specific ATP-binding cassette transporter (ATP-binding cassette sub-family A member 4) (RIM ABC transporter) (RIM protein) (RmP) (Stargardt disease protein)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; cholesterol transporter activity [GO:0017127]; phospholipid-translocating ATPase activity [GO:0004012]; phospholipid transporter activity [GO:0005548]; transporter activity [GO:0005215]
[311]	Q2M3G0	ATP-binding cassette sub-family B member 5 (ABCB5 P-gp) (P-glycoprotein ABCB5)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; efflux transmembrane transporter activity [GO:0015562]
[312]	O60706	ATP-binding cassette sub-family C member 9 (Sulfonylurea receptor 2)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; ion channel binding [GO:0044325]; potassium channel activity [GO:0005267]; potassium channel regulator activity [GO:0015459]; sulfonylurea receptor activity [GO:0008281]; transporter activity [GO:0005215]
[313]	Q09428	ATP-binding cassette sub-family C member 8 (Sulfonylurea receptor 1)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; ion channel binding [GO:0044325]; potassium channel activity [GO:0005267]; potassium ion transmembrane transporter activity [GO:0015079]; sulfonylurea receptor activity [GO:0008281]
[314]	Q92887	Canalicular multispecific organic anion transporter 1 (ATP-binding cassette sub-family C member 2) (Canalicular multidrug resistance protein) (Multidrug resistance-associated protein 2)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; organic anion transmembrane transporter activity [GO:0008514]
[315]	O15440	Multidrug resistance-associated protein 5 (ATP-binding cassette sub-family C member 5) (Multi-specific organic anion transporter C) (MOAT-C) (SMRP) (pABC11)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; organic anion transmembrane transporter activity [GO:0008514]
[316]	Q96J66	ATP-binding cassette sub-family C member 11 (Multidrug resistance-associated protein 8)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; organic anion transmembrane transporter activity [GO:0008514]; purine nucleotide transmembrane transporter activity [GO:0015216]
[317]	P21439	Phosphatidylcholine translocator ABCB4 (ATP-binding cassette sub-family B member 4) (Multidrug resistance protein 3) (EC 3.6.3.44) (P-glycoprotein 3)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; phosphatidylcholine-translocating ATPase activity [GO:0090554]; phosphatidylcholine transporter activity [GO:0008525]; xenobiotic-transporting ATPase activity [GO:0008559]
[318]	Q99758	ATP-binding cassette sub-family A member 3 (ABC-C transporter) (ATP-binding cassette transporter 3) (ATP-binding cassette 3)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; transporter activity [GO:0005215]
[319]	Q9NRK6	ATP-binding cassette sub-family B member 10, mitochondrial (ATP-binding cassette transporter 10) (ABC transporter 10 protein) (Mitochondrial	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; transporter activity



		ATP-binding cassette 2) (M-ABC2)	[GO:0005215]
[320]	O95255	Multidrug resistance-associated protein 6 (ATP-binding cassette sub-family C member 6) (Anthracycline resistance-associated protein) (Multi-specific organic anion transporter E) (MOAT-E)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; transporter activity [GO:0005215]
[321]	P08183	Multidrug resistance protein 1 (EC 3.6.3.44) (ATP-binding cassette sub-family B member 1) (P-glycoprotein 1) (CD antigen CD243)	ATPase activity, coupled to transmembrane movement of substances [GO:0042626]; ATP binding [GO:0005524]; transporter activity [GO:0005215]; xenobiotic-transporting ATPase activity [GO:0008559]
[322]	Q8IWQ3	Serine/threonine-protein kinase BRSK2 (EC 2.7.11.1) (Brain-selective kinase 2) (EC 2.7.11.26) (Brain-specific serine/threonine-protein kinase 2) (BR serine/threonine-protein kinase 2) (Serine/threonine-protein kinase 29) (Serine/threonine-protein kinase SAD-A)	ATPase binding [GO:0051117]; ATPase regulator activity [GO:0060590]; ATP binding [GO:0005524]; magnesium ion binding [GO:0000287]; protein serine/threonine kinase activity [GO:0004674]; tau-protein kinase activity [GO:0050321]
[323]	Q86TM6	E3 ubiquitin-protein ligase synoviolin (EC 6.3.2.-) (Synovial apoptosis inhibitor 1)	ATPase binding [GO:0051117]; chaperone binding [GO:0051087]; ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin protein ligase activity involved in ERAD pathway [GO:1904264]; ubiquitin-specific protease binding [GO:1990381]; unfolded protein binding [GO:0051082]; zinc ion binding [GO:0008270]
[324]	P16157	Ankyrin-1 (ANK-1) (Ankyrin-R) (Erythrocyte ankyrin)	ATPase binding [GO:0051117]; cytoskeletal adaptor activity [GO:0008093]; enzyme binding [GO:0019899]; spectrin binding [GO:0030507]; structural constituent of cytoskeleton [GO:0005200]; structural molecule activity [GO:0005198]
[325]	Q01484	Ankyrin-2 (ANK-2) (Ankyrin-B) (Brain ankyrin) (Non-erythroid ankyrin)	ATPase binding [GO:0051117]; enzyme binding [GO:0019899]; ion channel binding [GO:0044325]; potassium channel regulator activity [GO:0015459]; protein binding, bridging [GO:0030674]; protein kinase binding [GO:0019901]; spectrin binding [GO:0030507]
[326]	Q9UKV5	E3 ubiquitin-protein ligase AMFR (EC 6.3.2.-) (Autocrine motility factor receptor) (AMF receptor) (RING finger protein 45) (gp78)	BAT3 complex binding [GO:1904288]; chaperone binding [GO:0051087]; ligase activity [GO:0016874]; protein binding, bridging [GO:0030674]; receptor activity [GO:0004872]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin protein ligase activity involved in ERAD pathway [GO:1904264]; ubiquitin-protein transferase activity [GO:0004842]; ubiquitin-specific protease binding [GO:1990381]; ubiquitin-ubiquitin ligase activity [GO:0034450]; zinc ion binding [GO:0008270]
[327]	Q9NSC2	Sal-like protein 1 (Spalt-like transcription factor 1) (Zinc finger protein 794) (Zinc finger protein SALL1) (Zinc finger protein Spalt-1) (HSal1) (Sal-1)	beta-catenin binding [GO:0008013]; chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[328]	O75575	DNA-directed RNA polymerase III subunit RPC9 (RNA polymerase III subunit C9) (Calcitonin gene-related peptide-receptor component protein) (CGRP-RCP) (CGRP-receptor component protein)	calcitonin gene-related peptide receptor activity [GO:0001635]; DNA-directed RNA polymerase activity [GO:0003899]; nucleotide binding [GO:0000166]

		(CGRPRCP) (HsC17)	
[329]	P62879	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2 (G protein subunit beta-2) (Transducin beta chain 2)	calcium channel regulator activity [GO:0005246]; GTPase activity [GO:0003924]; GTPase binding [GO:0051020]; protein complex binding [GO:0032403]; signal transducer activity [GO:0004871]
[330]	P46531	Neurogenic locus notch homolog protein 1 (Notch 1) (hN1) (Translocation-associated notch protein TAN-1) [Cleaved into: Notch 1 extracellular truncation (NEXT); Notch 1 intracellular domain (NICD)]	calcium ion binding [GO:0005509]; chromatin DNA binding [GO:0031490]; core promoter binding [GO:0001047]; enzyme binding [GO:0019899]; enzyme inhibitor activity [GO:0004857]; receptor activity [GO:0004872]; sequence-specific DNA binding [GO:0043565]; transcriptional activator activity, RNA polymerase II transcription factor binding [GO:0001190]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[331]	P00740	Coagulation factor IX (EC 3.4.21.22) (Christmas factor) (Plasma thromboplastin component) (PTC) [Cleaved into: Coagulation factor IXa light chain; Coagulation factor IXa heavy chain]	calcium ion binding [GO:0005509]; endopeptidase activity [GO:0004175]; serine-type endopeptidase activity [GO:0004252]
[332]	P08709	Coagulation factor VII (EC 3.4.21.21) (Proconvertin) (Serum prothrombin conversion accelerator) (SPCA) (Eptacog alfa) [Cleaved into: Factor VII light chain; Factor VII heavy chain]	calcium ion binding [GO:0005509]; glycoprotein binding [GO:0001948]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[333]	P09871	Complement C1s subcomponent (EC 3.4.21.42) (C1 esterase) (Complement component 1 subcomponent s) [Cleaved into: Complement C1s subcomponent heavy chain; Complement C1s subcomponent light chain]	calcium ion binding [GO:0005509]; identical protein binding [GO:0042802]; serine-type endopeptidase activity [GO:0004252]
[334]	P00709	Alpha-lactalbumin (Lactose synthase B protein) (Lysozyme-like protein 7)	calcium ion binding [GO:0005509]; lactose synthase activity [GO:0004461]
[335]	P00742	Coagulation factor X (EC 3.4.21.6) (Stuart factor) (Stuart-Prower factor) [Cleaved into: Factor X light chain; Factor X heavy chain; Activated factor Xa heavy chain]	calcium ion binding [GO:0005509]; phospholipid binding [GO:0005543]; serine-type endopeptidase activity [GO:0004252]
[336]	Q04721	Neurogenic locus notch homolog protein 2 (Notch 2) (hN2) [Cleaved into: Notch 2 extracellular truncation (N2ECD); Notch 2 intracellular domain (N2ICD)]	calcium ion binding [GO:0005509]; receptor activity [GO:0004872]; transcription factor activity, ligand-activated RNA polymerase II transcription factor binding [GO:0038049]
[337]	P07478	Trypsin-2 (EC 3.4.21.4) (Anionic trypsinogen) (Serine protease 2) (Trypsin II)	calcium ion binding [GO:0005509]; serine-type endopeptidase activity [GO:0004252]
[338]	P04070	Vitamin K-dependent protein C (EC 3.4.21.69) (Anticoagulant protein C) (Autoprothrombin IIA) (Blood coagulation factor XIV) [Cleaved into: Vitamin K-dependent protein C light chain; Vitamin K-dependent protein C heavy chain; Activation peptide]	calcium ion binding [GO:0005509]; serine-type endopeptidase activity [GO:0004252]
[339]	P00736	Complement C1r subcomponent (EC 3.4.21.41) (Complement component 1 subcomponent r) [Cleaved into: Complement C1r subcomponent heavy chain; Complement C1r subcomponent light chain]	calcium ion binding [GO:0005509]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[340]	P35030	Trypsin-3 (EC 3.4.21.4) (Brain trypsinogen) (Mesotrypsinogen) (Serine protease 3) (Serine protease 4) (Trypsin III) (Trypsin IV)	calcium ion binding [GO:0005509]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[341]	P05981	Serine protease hepsin (EC 3.4.21.106) (Transmembrane protease serine 1) [Cleaved into: Serine protease hepsin non-catalytic chain; Serine protease hepsin catalytic chain]	calcium-activated potassium channel activity [GO:0015269]; peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]; serine-type exopeptidase activity [GO:0070008]; serine-type peptidase activity [GO:0008236]
[342]	O00187	Mannan-binding lectin serine protease 2 (EC 3.4.21.104) (MBL-associated serine protease 2)	calcium-dependent protein binding [GO:0048306]; calcium ion binding [GO:0005509]; complement

		(Mannose-binding protein-associated serine protease 2) (MASP-2) [Cleaved into: Mannan-binding lectin serine protease 2 A chain; Mannan-binding lectin serine protease 2 B chain]	component C4b binding [GO:0001855]; peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]
[343]	P48740	Mannan-binding lectin serine protease 1 (EC 3.4.21.-) (Complement factor MASP-3) (Complement-activating component of Ra-reactive factor) (Mannose-binding lectin-associated serine protease 1) (MASP-1) (Mannose-binding protein-associated serine protease) (Ra-reactive factor serine protease p100) (RaRF) (Serine protease 5) [Cleaved into: Mannan-binding lectin serine protease 1 heavy chain; Mannan-binding lectin serine protease 1 light chain]	calcium-dependent protein binding [GO:0048306]; calcium ion binding [GO:0005509]; peptidase activity [GO:0008233]; protein homodimerization activity [GO:0042803]; serine-type endopeptidase activity [GO:0004252]
[344]	Q66K89	Transcription factor E4F1 (EC 6.3.2.-) (E4F transcription factor 1) (Putative E3 ubiquitin-protein ligase E4F1) (Transcription factor E4F) (p120E4F) (p50E4F)	cAMP response element binding [GO:0035497]; DNA binding [GO:0003677]; ligase activity [GO:0016874]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001227]; transcription coactivator activity [GO:0003713]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[345]	O14775	Guanine nucleotide-binding protein subunit beta-5 (Gbeta5) (Transducin beta chain 5)	chaperone binding [GO:0051087]; G-protein gamma-subunit binding [GO:0031682]; GTPase activity [GO:0003924]; signal transducer activity [GO:0004871]
[346]	P11441	Ubiquitin-like protein 4A (Ubiquitin-like protein GDX)	chaperone binding [GO:0051087]; ubiquitin-like protein transferase activity [GO:0019787]
[347]	P41182	B-cell lymphoma 6 protein (BCL-6) (B-cell lymphoma 5 protein) (BCL-5) (Protein LAZ-3) (Zinc finger and BTB domain-containing protein 27) (Zinc finger protein 51)	chromatin binding [GO:0003682]; chromatin DNA binding [GO:0031490]; intronic transcription regulatory region sequence-specific DNA binding [GO:0001161]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence-specific binding [GO:0001227]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[348]	P05423	DNA-directed RNA polymerase III subunit RPC4 (RNA polymerase III subunit C4) (DNA-directed RNA polymerase III subunit D) (Protein BN51) (RNA polymerase III 47 kDa subunit) (RPC53 homolog)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[349]	O14802	DNA-directed RNA polymerase III subunit RPC1 (RNA polymerase III subunit C1) (EC 2.7.7.6) (DNA-directed RNA polymerase III largest subunit) (DNA-directed RNA polymerase III subunit A) (RNA polymerase III 155 kDa subunit) (RPC155) (RNA polymerase III subunit C160)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; ribonucleoside binding [GO:0032549]; zinc ion binding [GO:0008270]
[350]	Q9BRR0	Zinc finger protein with KRAB and SCAN domains 3 (Zinc finger and SCAN domain-containing protein 13) (Zinc finger protein 306) (Zinc finger protein 309) (Zinc finger protein 47 homolog) (Zf47) (Zfp-47)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific

			binding [GO:0001078]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[351]	Q9HBE1	POZ-, AT hook-, and zinc finger-containing protein 1 (BTB/POZ domain zinc finger transcription factor) (Protein kinase A RI subunit alpha-associated protein) (Zinc finger and BTB domain-containing protein 19) (Zinc finger protein 278) (Zinc finger sarcoma gene protein)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]
[352]	P29375	Lysine-specific demethylase 5A (EC 1.14.11.-) (Histone demethylase JARID1A) (Jumonji/ARID domain-containing protein 1A) (Retinoblastoma-binding protein 2) (RBBP-2)	chromatin binding [GO:0003682]; DNA binding [GO:0003677]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[353]	Q13112	Chromatin assembly factor 1 subunit B (CAF-1 subunit B) (Chromatin assembly factor I p60 subunit) (CAF-I 60 kDa subunit) (CAF-I p60) (M-phase phosphoprotein 7)	chromatin binding [GO:0003682]; histone binding [GO:0042393]; unfolded protein binding [GO:0051082]
[354]	Q04724	Transducin-like enhancer protein 1 (E(Sp1) homolog) (Enhancer of split groucho-like protein 1) (ESG1)	chromatin binding [GO:0003682]; identical protein binding [GO:0042802]; RNA polymerase II transcription corepressor activity [GO:0001106]; transcription factor binding [GO:0008134]
[355]	O43623	Zinc finger protein SNAI2 (Neural crest transcription factor Slug) (Protein snail homolog 2)	chromatin binding [GO:0003682]; metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0003705]
[356]	Q9GZV1	Ankyrin repeat domain-containing protein 2 (Skeletal muscle ankyrin repeat protein) (hArpp)	chromatin binding [GO:0003682]; protein kinase B binding [GO:0043422]; RNA polymerase II sequence-specific DNA binding transcription factor binding [GO:0061629]; structural constituent of muscle [GO:0008307]; titin binding [GO:0031432]
[357]	Q8N7H5	RNA polymerase II-associated factor 1 homolog (hPAF1) (Pancreatic differentiation protein 2)	chromatin binding [GO:0003682]; RNA polymerase II core binding [GO:0000993]
[358]	Q04727	Transducin-like enhancer protein 4 (Grg-4) (Groucho-related protein 4)	chromatin binding [GO:0003682]; transcription corepressor activity [GO:0003714]; transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0003705]
[359]	P00751	Complement factor B (EC 3.4.21.47) (C3/C5 convertase) (Glycine-rich beta glycoprotein) (GBG) (PBF2) (Properdin factor B) [Cleaved into: Complement factor B Ba fragment; Complement factor B Bb fragment]	complement binding [GO:0001848]; serine-type endopeptidase activity [GO:0004252]
[360]	Q14872	Metal regulatory transcription factor 1 (MRE-binding transcription factor) (Transcription factor MTF-1)	core promoter binding [GO:0001047]; DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]; transcription coactivator activity [GO:0003713]; transcription factor

			activity, sequence-specific DNA binding [GO:0003700]
[361]	Q8IXW5	Putative RNA polymerase II subunit B1 CTD phosphatase RPAP2 (EC 3.1.3.16) (RNA polymerase II-associated protein 2)	CTD phosphatase activity [GO:0008420]; metal ion binding [GO:0046872]
[362]	Q86WV6	Stimulator of interferon genes protein (hSTING) (Endoplasmic reticulum interferon stimulator) (ERIS) (Mediator of IRF3 activation) (hMITA) (Transmembrane protein 173)	cyclic-di-GMP binding [GO:0035438]; cyclic-GMP-AMP binding [GO:0061507]; identical protein binding [GO:0042802]; protein homodimerization activity [GO:0042803]; protein kinase binding [GO:0019901]; transcription factor binding [GO:0008134]
[363]	P31941	DNA dC->dU-editing enzyme APOBEC-3A (A3A) (EC 3.5.4.-) (Phorbolin-1)	cytidine deaminase activity [GO:0004126]; deoxycytidine deaminase activity [GO:0047844]; zinc ion binding [GO:0008270]
[364]	Q9GZX7	Single-stranded DNA cytosine deaminase (EC 3.5.4.38) (Activation-induced cytidine deaminase) (Cytidine aminohydrolase)	cytidine deaminase activity [GO:0004126]; ubiquitin protein ligase binding [GO:0031625]; zinc ion binding [GO:0008270]
[365]	Q9NS91	E3 ubiquitin-protein ligase RAD18 (EC 6.3.2.-) (Postreplication repair protein RAD18) (hHR18) (hRAD18) (RING finger protein 73)	damaged DNA binding [GO:0003684]; ligase activity [GO:0016874]; polyubiquitin binding [GO:0031593]; single-stranded DNA-dependent ATPase activity [GO:0043142]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin protein ligase binding [GO:0031625]; Y-form DNA binding [GO:0000403]; zinc ion binding [GO:0008270]
[366]	Q9NUX5	Protection of telomeres protein 1 (hPot1) (POT1-like telomere end-binding protein)	DEAD/H-box RNA helicase binding [GO:0017151]; G-rich strand telomeric DNA binding [GO:0098505]; single-stranded telomeric DNA binding [GO:0043047]; telomerase inhibitor activity [GO:0010521]
[367]	Q9UK73	Protein fem-1 homolog B (FEM1b) (FEM1-beta) (Fem-1-like death receptor-binding protein alpha) (Fem-1-like in apoptotic pathway protein alpha) (F1A-alpha)	death receptor binding [GO:0005123]; ubiquitin-protein transferase activity [GO:0004842]
[368]	Q9UH17	DNA dC->dU-editing enzyme APOBEC-3B (A3B) (EC 3.5.4.-) (Phorbolin-1-related protein) (Phorbolin-2/3)	deoxycytidine deaminase activity [GO:0047844]; poly(A) RNA binding [GO:0044822]; zinc ion binding [GO:0008270]
[369]	Q6B0I6	Lysine-specific demethylase 4D (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 3D) (Jumonji domain-containing protein 2D)	dioxygenase activity [GO:0051213]; histone demethylase activity (H3-K9 specific) [GO:0032454]; metal ion binding [GO:0046872]
[370]	B2RXH2	Lysine-specific demethylase 4E (EC 1.14.11.-) (KDM4D-like protein) (Lysine-specific demethylase 4D-like)	dioxygenase activity [GO:0051213]; metal ion binding [GO:0046872]
[371]	Q15652	Probable JmjC domain-containing histone demethylation protein 2C (EC 1.14.11.-) (Jumonji domain-containing protein 1C) (Thyroid receptor-interacting protein 8) (TR-interacting protein 8) (TRIP-8)	dioxygenase activity [GO:0051213]; metal ion binding [GO:0046872]; thyroid hormone receptor binding [GO:0046966]
[372]	O94953	Lysine-specific demethylase 4B (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 3B) (Jumonji domain-containing protein 2B)	dioxygenase activity [GO:0051213]; zinc ion binding [GO:0008270]
[373]	Q15573	TATA box-binding protein-associated factor RNA polymerase I subunit A (RNA polymerase I-specific TBP-associated factor 48 kDa) (TAFI48) (TATA box-binding protein-associated factor 1A) (TBP-associated factor 1A) (Transcription factor SL1) (Transcription initiation factor SL1/TIF-IB subunit A)	DNA binding [GO:0003677]
[374]	Q9H5J8	TATA box-binding protein-associated factor RNA polymerase I subunit D (RNA polymerase I-	DNA binding [GO:0003677]

		specific TBP-associated factor 41 kDa) (TAFI41) (TATA box-binding protein-associated factor 1D) (TBP-associated factor 1D) (Transcription initiation factor SL1/TIF-IB subunit D)	
[375]	Q96AP0	Adrenocortical dysplasia protein homolog (POT1 and TIN2-interacting protein)	DNA binding [GO:0003677]; DNA polymerase binding [GO:0070182]
[376]	P19387	DNA-directed RNA polymerase II subunit RPB3 (RNA polymerase II subunit 3) (RNA polymerase II subunit B3) (DNA-directed RNA polymerase II 33 kDa polypeptide) (RPB33) (DNA-directed RNA polymerase II subunit C) (RPB31)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[377]	Q9BUI4	DNA-directed RNA polymerase III subunit RPC3 (RNA polymerase III subunit C3) (DNA-directed RNA polymerase III subunit C) (RNA polymerase III 62 kDa subunit) (RPC62)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[378]	Q9H1D9	DNA-directed RNA polymerase III subunit RPC6 (RNA polymerase III subunit C6) (DNA-directed RNA polymerase III subunit F) (RNA polymerase III 39 kDa subunit) (RPC39)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[379]	Q9Y535	DNA-directed RNA polymerase III subunit RPC8 (RNA polymerase III subunit C8) (DNA-directed RNA polymerase III subunit H) (RNA polymerase III subunit 22.9 kDa subunit) (RPC22.9)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[380]	O15160	DNA-directed RNA polymerases I and III subunit RPAC1 (DNA-directed RNA polymerase I subunit C) (RNA polymerases I and III subunit AC1) (AC40) (DNA-directed RNA polymerases I and III 40 kDa polypeptide) (RPA40) (RPA39) (RPC40)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[381]	Q9Y2S0	DNA-directed RNA polymerases I and III subunit RPAC2 (RNA polymerases I and III subunit AC2) (AC19) (DNA-directed RNA polymerase I subunit D) (RNA polymerase I 16 kDa subunit) (RPA16) (RPC16) (hRPA19)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[382]	Q9BWH6	RNA polymerase II-associated protein 1	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]
[383]	Q9H9Y6	DNA-directed RNA polymerase I subunit RPA2 (RNA polymerase I subunit 2) (EC 2.7.7.6) (DNA-directed RNA polymerase I 135 kDa polypeptide) (RPA135)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; metal ion binding [GO:0046872]; ribonucleoside binding [GO:0032549]
[384]	Q9NW08	DNA-directed RNA polymerase III subunit RPC2 (RNA polymerase III subunit C2) (EC 2.7.7.6) (C128) (DNA-directed RNA polymerase III 127.6 kDa polypeptide) (DNA-directed RNA polymerase III subunit B)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; metal ion binding [GO:0046872]; ribonucleoside binding [GO:0032549]
[385]	O95602	DNA-directed RNA polymerase I subunit RPA1 (RNA polymerase I subunit A1) (EC 2.7.7.6) (A190) (DNA-directed RNA polymerase I largest subunit) (DNA-directed RNA polymerase I subunit A) (RNA polymerase I 194 kDa subunit) (RPA194)	DNA binding [GO:0003677]; DNA-directed RNA polymerase activity [GO:0003899]; zinc ion binding [GO:0008270]
[386]	Q05516	Zinc finger and BTB domain-containing protein 16 (Promyelocytic leukemia zinc finger protein) (Zinc finger protein 145) (Zinc finger protein PLZF)	DNA binding [GO:0003677]; double-stranded DNA binding [GO:0003690]; identical protein binding [GO:0042802]; metal ion binding [GO:0046872]; protein homodimerization activity [GO:0042803]; RNA polymerase II distal enhancer sequence-specific DNA binding [GO:0000980]; transcriptional repressor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0001206]
[387]	Q9H171	Z-DNA-binding protein 1 (Tumor stroma and activated macrophage protein DLM-1)	DNA binding [GO:0003677]; double-stranded RNA adenosine deaminase activity [GO:0003726]; left-handed Z-DNA binding [GO:0003692]; RNA

			binding [GO:0003723]
[388]	P25490	Transcriptional repressor protein YY1 (Delta transcription factor) (INO80 complex subunit S) (NF-E1) (Yin and yang 1) (YY-1)	DNA binding [GO:0003677]; enhancer sequence-specific DNA binding [GO:0001158]; four-way junction DNA binding [GO:0000400]; RNA binding [GO:0003723]; SMAD binding [GO:0046332]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcription coactivator activity [GO:0003713]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]; zinc ion binding [GO:0008270]
[389]	Q9UKN8	General transcription factor 3C polypeptide 4 (EC 2.3.1.48) (TF3C-delta) (Transcription factor IIIC 90 kDa subunit) (TFIIIC 90 kDa subunit) (TFIIIC90) (Transcription factor IIIC subunit delta)	DNA binding [GO:0003677]; enzyme activator activity [GO:0008047]; histone acetyltransferase activity [GO:0004402]
[390]	Q9UGL1	Lysine-specific demethylase 5B (EC 1.14.11.-) (Cancer/testis antigen 31) (CT31) (Histone demethylase JARID1B) (Jumonji/ARID domain-containing protein 1B) (PLU-1) (Retinoblastoma-binding protein 2 homolog 1) (RBP2-H1)	DNA binding [GO:0003677]; histone demethylase activity (H3-dimethyl-K4 specific) [GO:0034648]; histone demethylase activity (H3-K4 specific) [GO:0032453]; histone demethylase activity (H3-trimethyl-K4 specific) [GO:0034647]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[391]	P41229	Lysine-specific demethylase 5C (EC 1.14.11.-) (Histone demethylase JARID1C) (Jumonji/ARID domain-containing protein 1C) (Protein SmcX) (Protein Xe169)	DNA binding [GO:0003677]; histone demethylase activity (H3-K4 specific) [GO:0032453]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; zinc ion binding [GO:0008270]
[392]	Q9BY66	Lysine-specific demethylase 5D (EC 1.14.11.-) (Histocompatibility Y antigen) (H-Y) (Histone demethylase JARID1D) (Jumonji/ARID domain-containing protein 1D) (Protein SmcY)	DNA binding [GO:0003677]; histone demethylase activity (H3-K4 specific) [GO:0032453]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; zinc ion binding [GO:0008270]
[393]	Q9NQV6	PR domain zinc finger protein 10 (EC 2.1.1.-) (PR domain-containing protein 10) (Tristanin)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; methyltransferase activity [GO:0008168]
[394]	Q03923	Zinc finger protein 85 (Zinc finger protein HPF4) (Zinc finger protein HTF1)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcription corepressor activity [GO:0003714]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[395]	Q9NX65	Zinc finger and SCAN domain-containing protein 32 (Human cervical cancer suppressor gene 5 protein) (HCCS-5) (Zinc finger protein 434)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; RNA polymerase II transcription factor activity, sequence-specific DNA binding [GO:0000981]
[396]	A6NJL1	Zinc finger and SCAN domain-containing protein	DNA binding [GO:0003677]; metal ion binding

		5B	[GO:0046872]; RNA polymerase II transcription factor activity, sequence-specific DNA binding [GO:0000981]
[397]	Q8TF47	Zinc finger protein 90 homolog (Zfp-90) (Zinc finger protein 756)	DNA binding [GO:0003677]; metal ion binding [GO:0046872]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]
[398]	Q8TD23	Zinc finger protein 675 (TRAF6-binding zinc finger protein) (TRAF6-inhibitory zinc finger protein)	DNA binding [GO:0003677]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; ubiquitin protein ligase binding [GO:0031625]; zinc ion binding [GO:0008270]
[399]	Q92985	Interferon regulatory factor 7 (IRF-7)	DNA binding [GO:0003677]; RNA polymerase II core promoter sequence-specific DNA binding [GO:0000979]; transcription factor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0000982]
[400]	O60318	Germinal-center associated nuclear protein (GANP) (80 kDa MCM3-associated protein) (MCM3 acetylating protein) (MCM3AP) (EC 2.3.1.-) (MCM3 acetyltransferase)	DNA binding [GO:0003677]; transferase activity, transferring acyl groups [GO:0016746]
[401]	Q9Y3C5	RING finger protein 11	DNA binding [GO:0003677]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[402]	Q9NVU0	DNA-directed RNA polymerase III subunit RPC5 (RNA polymerase III subunit C5) (DNA-directed RNA polymerase III 80 kDa polypeptide)	DNA-directed RNA polymerase activity [GO:0003899]
[403]	Q9H944	Mediator of RNA polymerase II transcription subunit 20 (Mediator complex subunit 20) (TRF-proximal protein homolog) (hTRFP)	DNA-directed RNA polymerase activity [GO:0003899]; RNA polymerase II transcription cofactor activity [GO:0001104]; transcription coactivator activity [GO:0003713]; ubiquitin protein ligase activity [GO:0061630]
[404]	P43034	Platelet-activating factor acetylhydrolase IB subunit alpha (Lissencephaly-1 protein) (LIS-1) (PAF acetylhydrolase 45 kDa subunit) (PAF-AH 45 kDa subunit) (PAF-AH alpha) (PAFAH alpha)	dynactin binding [GO:0034452]; dynein binding [GO:0045502]; heparin binding [GO:0008201]; microtubule binding [GO:0008017]; phospholipase binding [GO:0043274]; phosphoprotein binding [GO:0051219]; protein homodimerization activity [GO:0042803]
[405]	A1KZ92	Peroxidasin-like protein (EC 1.11.1.7) (Cardiac peroxidase) (Vascular peroxidase 2) (polysomal ribonuclease 1) (PRM1)	endonuclease activity [GO:0004519]; heme binding [GO:0020037]; metal ion binding [GO:0046872]; peroxidase activity [GO:0004601]
[406]	P07288	Prostate-specific antigen (PSA) (EC 3.4.21.77) (Gamma-seminoprotein) (Seminin) (Kallikrein-3) (P-30 antigen) (Semenogelase)	endopeptidase activity [GO:0004175]; hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in linear amides [GO:0016811]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[407]	Q9HB65	RNA polymerase II elongation factor ELL3	enhancer binding [GO:0035326]
[408]	O60237	Protein phosphatase 1 regulatory subunit 12B (Myosin phosphatase-targeting subunit 2) (Myosin phosphatase target subunit 2)	enzyme activator activity [GO:0008047]; phosphatase regulator activity [GO:0019208]
[409]	P25963	NF-kappa-B inhibitor alpha (I-kappa-B-alpha) (Ikb-alpha) (IkappaBalpha) (Major histocompatibility complex enhancer-binding protein MAD3)	enzyme binding [GO:0019899]; identical protein binding [GO:0042802]; NF-kappaB binding [GO:0051059]; nuclear localization sequence binding [GO:0008139]; transcription factor binding [GO:0008134]; ubiquitin protein ligase binding [GO:0031625]
[410]	Q9BWG6	Sodium channel modifier 1	enzyme binding [GO:0019899]; metal ion binding [GO:0046872]
[411]	Q9H2K2	Tankyrase-2 (TANK2) (EC 2.4.2.30) (ADP-ribosyltransferase diphtheria toxin-like 6) (ARTD6) (Poly [ADP-ribose] polymerase 5B) (TNKS-2) (TRF1-interacting ankyrin-related ADP-	enzyme binding [GO:0019899]; metal ion binding [GO:0046872]; NAD+ ADP-ribosyltransferase activity [GO:0003950]



		ribose polymerase 2) (Tankyrase II) (Tankyrase-like protein) (Tankyrase-related protein)	
[412]	O00628	Peroxisomal targeting signal 2 receptor (PTS2 receptor) (Peroxin-7)	enzyme binding [GO:0019899]; peroxisome matrix targeting signal-2 binding [GO:0005053]; protein homodimerization activity [GO:0042803]
[413]	Q12834	Cell division cycle protein 20 homolog (p55CDC)	enzyme binding [GO:0019899]; protein C-terminus binding [GO:0008022]
[414]	P20226	TATA-box-binding protein (TATA sequence-binding protein) (TATA-binding factor) (TATA-box factor) (Transcription initiation factor TFIID TBP subunit)	enzyme binding [GO:0019899]; repressing transcription factor binding [GO:0070491]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]; transcription regulatory region DNA binding [GO:0044212]
[415]	P40337	Von Hippel-Lindau disease tumor suppressor (Protein G7) (pVHL)	enzyme binding [GO:0019899]; transcription factor binding [GO:0008134]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin-protein transferase activity [GO:0004842]
[416]	Q8N5D0	WD and tetratricopeptide repeats protein 1	enzyme inhibitor activity [GO:0004857]
[417]	Q9BSK4	Protein fem-1 homolog A (FEM1a) (FEM1-alpha) (Prostaglandin E receptor 4-associated protein)	EP4 subtype prostaglandin E2 receptor binding [GO:0031867]; ubiquitin-protein transferase activity [GO:0004842]
[418]	Q15650	Activating signal cointegrator 1 (ASC-1) (Thyroid receptor-interacting protein 4) (TR-interacting protein 4) (TRIP-4)	estrogen receptor binding [GO:0030331]; histone acetyltransferase binding [GO:0035035]; ligand-dependent nuclear receptor binding [GO:0016922]; protease binding [GO:0002020]; transcription coactivator activity [GO:0003713]; ubiquitin-like protein ligase binding [GO:0044389]; zinc ion binding [GO:0008270]
[419]	Q96IC2	Putative RNA exonuclease NEF-sp (EC 3.1.-.-)	exonuclease activity [GO:0004527]; nucleotide binding [GO:0000166]; RNA binding [GO:0003723]
[420]	Q92626	Peroxidasin homolog (EC 1.11.1.7) (Melanoma-associated antigen MG50) (Vascular peroxidase 1) (p53-responsive gene 2 protein)	extracellular matrix structural constituent [GO:0005201]; heme binding [GO:0020037]; interleukin-1 receptor antagonist activity [GO:0005152]; metal ion binding [GO:0046872]; peroxidase activity [GO:0004601]
[421]	Q9ULT6	E3 ubiquitin-protein ligase ZNRF3 (EC 6.3.2.-) (RING finger protein 203) (Zinc/RING finger protein 3)	frizzled binding [GO:0005109]; ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[422]	P00750	Tissue-type plasminogen activator (t-PA) (t-plasminogen activator) (tPA) (EC 3.4.21.68) (Alteplase) (Retelase) [Cleaved into: Tissue-type plasminogen activator chain A; Tissue-type plasminogen activator chain B]	glycoprotein binding [GO:0001948]; phosphoprotein binding [GO:0051219]; receptor binding [GO:0005102]; serine-type endopeptidase activity [GO:0004252]
[423]	Q07617	Sperm-associated antigen 1 (HSD-3.8) (Infertility-related sperm protein Spag-1)	GTP binding [GO:0005525]; hydrolase activity [GO:0016787]
[424]	Q96NW4	Ankyrin repeat domain-containing protein 27 (VPS9 domain-containing protein)	GTPase activator activity [GO:0005096]; guanyl-nucleotide exchange factor activity [GO:0005085]; Rab GTPase binding [GO:0017137]
[425]	Q9H4K7	Mitochondrial ribosome-associated GTPase 2 (GTP-binding protein 5) (Protein obg homolog 1) (ObgH1)	GTPase activity [GO:0003924]; GTP binding [GO:0005525]; magnesium ion binding [GO:0000287]
[426]	P62873	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1 (Transducin beta chain 1)	GTPase activity [GO:0003924]; GTPase binding [GO:0051020]; protein complex binding [GO:0032403]; signal transducer activity [GO:0004871]
[427]	P16520	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-3 (Transducin beta chain 3)	GTPase activity [GO:0003924]; GTPase binding [GO:0051020]; signal transducer activity [GO:0004871]

[428]	P63218	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-5	GTPase activity [GO:0003924]; PDZ domain binding [GO:0030165]; signal transducer activity [GO:0004871]
[429]	P50151	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-10	GTPase activity [GO:0003924]; signal transducer activity [GO:0004871]
[430]	P63215	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-3	GTPase activity [GO:0003924]; signal transducer activity [GO:0004871]
[431]	Q9UK08	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-8 (Gamma-9)	GTPase activity [GO:0003924]; signal transducer activity [GO:0004871]
[432]	O14610	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-T2 (G gamma-C) (G-gamma-8) (G-gamma-9) (Guanine nucleotide binding protein gamma transducing activity polypeptide 2)	GTPase activity [GO:0003924]; signal transducer activity [GO:0004871]
[433]	Q6W2J9	BCL-6 corepressor (BCoR)	heat shock protein binding [GO:0031072]; histone deacetylase binding [GO:0042826]; transcription corepressor activity [GO:0003714]; transcription factor binding [GO:0008134]; transcription regulatory region DNA binding [GO:0044212]
[434]	P03951	Coagulation factor XI (FXI) (EC 3.4.21.27) (Plasma thromboplastin antecedent) (PTA) [Cleaved into: Coagulation factor XIa heavy chain; Coagulation factor XIa light chain]	heparin binding [GO:0008201]; serine-type endopeptidase activity [GO:0004252]
[435]	Q09028	Histone-binding protein RBBP4 (Chromatin assembly factor 1 subunit C) (CAF-1 subunit C) (Chromatin assembly factor I p48 subunit) (CAF-I 48 kDa subunit) (CAF-I p48) (Nucleosome-remodeling factor subunit RBAP48) (Retinoblastoma-binding protein 4) (RBBP-4) (Retinoblastoma-binding protein p48)	histone binding [GO:0042393]; histone deacetylase binding [GO:0042826]
[436]	Q6IA86	Elongator complex protein 2 (ELP2) (SHINC-2) (STAT3-interacting protein 1) (StIP1)	histone binding [GO:0042393]; transcriptional repressor activity, RNA polymerase II transcription factor binding [GO:0001191]
[437]	Q14526	Hypermethylated in cancer 1 protein (Hic-1) (Zinc finger and BTB domain-containing protein 29)	histone deacetylase binding [GO:0042826]; metal ion binding [GO:0046872]; sequence-specific DNA binding [GO:0043565]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[438]	Q6ZMT4	Lysine-specific demethylase 7A (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 1D) (Lysine-specific demethylase 7)	histone demethylase activity (H3-K27 specific) [GO:0071558]; histone demethylase activity (H3-K36 specific) [GO:0051864]; histone demethylase activity (H3-K9 specific) [GO:0032454]; histone demethylase activity (H4-K20 specific) [GO:0035575]; iron ion binding [GO:0005506]; methylated histone binding [GO:0035064]; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors [GO:0016706]; zinc ion binding [GO:0008270]
[439]	O75164	Lysine-specific demethylase 4A (EC 1.14.11.-) (JmjC domain-containing histone demethylation protein 3A) (Jumonji domain-containing protein 2A)	histone demethylase activity (H3-K36 specific) [GO:0051864]; methylated histone binding [GO:0035064]; ubiquitin protein ligase binding [GO:0031625]; zinc ion binding [GO:0008270]
[440]	Q6NYC1	Bifunctional arginine demethylase and lysyl-hydroxylase JMJD6 (EC 1.14.11.-) (Histone arginine demethylase JMJD6) (JmjC domain-containing protein 6) (Jumonji domain-containing protein 6) (Lysyl-hydroxylase JMJD6) (Peptide-lysine 5-dioxygenase JMJD6) (Phosphatidylserine receptor) (Protein PTDSR)	histone demethylase activity (H3-R2 specific) [GO:0033746]; histone demethylase activity (H4-R3 specific) [GO:0033749]; identical protein binding [GO:0042802]; iron ion binding [GO:0005506]; peptidyl-lysine 5-dioxygenase activity [GO:0070815]; receptor activity [GO:0004872]; RNA binding [GO:0003723];

			single-stranded RNA binding [GO:0003727]
[441]	Q9BYW2	Histone-lysine N-methyltransferase SETD2 (EC 2.1.1.43) (HIF-1) (Huntingtin yeast partner B) (Huntingtin-interacting protein 1) (HIP-1) (Huntingtin-interacting protein B) (Lysine N-methyltransferase 3A) (SET domain-containing protein 2) (hSET2) (p231HBP)	histone-lysine N-methyltransferase activity [GO:0018024]; histone methyltransferase activity (H3-K36 specific) [GO:0046975]
[442]	Q9NQV7	Histone-lysine N-methyltransferase PRDM9 (EC 2.1.1.43) (PR domain zinc finger protein 9) (PR domain-containing protein 9)	histone-lysine N-methyltransferase activity [GO:0018024]; metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]
[443]	Q9BX68	Histidine triad nucleotide-binding protein 2, mitochondrial (HINT-2) (EC 3.-.-.-) (HINT-3) (HIT-17kDa) (PKCI-1-related HIT protein)	hydrolase activity [GO:0016787]; nucleotide binding [GO:0000166]
[444]	P49773	Histidine triad nucleotide-binding protein 1 (EC 3.-.-.-) (Adenosine 5'-monophosphoramidase) (Protein kinase C inhibitor 1) (Protein kinase C-interacting protein 1) (PKCI-1)	hydrolase activity [GO:0016787]; nucleotide binding [GO:0000166]; protein kinase C binding [GO:0005080]
[445]	Q9UKR3	Kallikrein-13 (EC 3.4.21.-) (Kallikrein-like protein 4) (KLK-L4)	hydrolase activity [GO:0016787]; serine-type endopeptidase activity [GO:0004252]
[446]	Q93033	Immunoglobulin superfamily member 2 (IgSF2) (Cell surface glycoprotein V7) (Glu-Trp-Ile EWI motif-containing protein 101) (EWI-101) (CD antigen CD101)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amides [GO:0016812]
[447]	Q9NRW3	DNA dC->dU-editing enzyme APOBEC-3C (A3C) (EC 3.5.4.-) (APOBEC1-like) (Phorbolin I)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amidines [GO:0016814]; poly(A) RNA binding [GO:0044822]; zinc ion binding [GO:0008270]
[448]	Q96AK3	DNA dC->dU-editing enzyme APOBEC-3D (A3D) (EC 3.5.4.-)	hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in cyclic amidines [GO:0016814]; zinc ion binding [GO:0008270]
[449]	Q9HCM9	E3 ubiquitin-protein ligase TRIM39 (EC 6.3.2.-) (RING finger protein 23) (Testis-abundant finger protein) (Tripartite motif-containing protein 39)	identical protein binding [GO:0042802]; ligase activity [GO:0016874]; zinc ion binding [GO:0008270]
[450]	P61626	Lysozyme C (EC 3.2.1.17) (1,4-beta-N-acetylmuramidase C)	identical protein binding [GO:0042802]; lysozyme activity [GO:0003796]
[451]	Q8IUH5	Palmitoyltransferase ZDHHC17 (EC 2.3.1.225) (Huntingtin yeast partner H) (Huntingtin-interacting protein 14) (HIP-14) (Huntingtin-interacting protein 3) (HIP-3) (Huntingtin-interacting protein H) (Putative MAPK-activating protein PM11) (Putative NF-kappa-B-activating protein 205) (Zinc finger DHHC domain-containing protein 17) (DHHC-17)	identical protein binding [GO:0042802]; magnesium ion transmembrane transporter activity [GO:0015095]; palmitoyltransferase activity [GO:0016409]; protein-cysteine S-palmitoyltransferase activity [GO:0019706]; signal transducer activity [GO:0004871]; zinc ion binding [GO:0008270]
[452]	Q9BV20	Methylthioribose-1-phosphate isomerase (M1Pi) (MTR-1-P isomerase) (EC 5.3.1.23) (Mediator of RhoA-dependent invasion) (S-methyl-5-thioribose-1-phosphate isomerase) (Translation initiation factor eIF-2B subunit alpha/beta/delta-like protein)	identical protein binding [GO:0042802]; S-methyl-5-thioribose-1-phosphate isomerase activity [GO:0046523]
[453]	O95863	Zinc finger protein SNAI1 (Protein snail homolog 1) (Protein sna)	kinase binding [GO:0019900]; metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]
[454]	Q9Y577	E3 ubiquitin-protein ligase TRIM17 (EC 6.3.2.-) (RING finger protein 16) (Testis RING finger protein) (Tripartite motif-containing protein 17)	ligase activity [GO:0016874]; protein binding, bridging [GO:0030674]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[455]	Q8IYU2	E3 ubiquitin-protein ligase HACE1 (EC 6.3.2.-) (HECT domain and ankyrin repeat-containing E3 ubiquitin-protein ligase 1)	ligase activity [GO:0016874]; Rab GTPase binding [GO:0017137]; Rac GTPase binding [GO:0048365]; ubiquitin-protein transferase activity [GO:0004842]

[456]	O95071	E3 ubiquitin-protein ligase UBR5 (EC 6.3.2.-) (E3 ubiquitin-protein ligase, HECT domain-containing 1) (Hyperplastic discs protein homolog) (hHYD) (Progesterin-induced protein)	ligase activity [GO:0016874]; RNA binding [GO:0003723]; ubiquitin-protein transferase activity [GO:0004842]; ubiquitin-ubiquitin ligase activity [GO:0034450]; zinc ion binding [GO:0008270]
[457]	Q96AX9	E3 ubiquitin-protein ligase MIB2 (EC 6.3.2.-) (Mind bomb homolog 2) (Novel zinc finger protein) (Novelzin) (Putative NF-kappa-B-activating protein 002N) (Skeletrophin) (Zinc finger ZZ type with ankyrin repeat domain protein 1)	ligase activity [GO:0016874]; signal transducer activity [GO:0004871]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[458]	Q9Y297	F-box/WD repeat-containing protein 1A (E3RSIkappaB) (Epididymis tissue protein Li 2a) (F-box and WD repeats protein beta-TrCP) (pIkappaBalpha-E3 receptor subunit)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]
[459]	Q9Y4L5	E3 ubiquitin-protein ligase RNF115 (EC 6.3.2.-) (RING finger protein 115) (Rabring 7) (Zinc finger protein 364)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[460]	O43567	E3 ubiquitin-protein ligase RNF13 (EC 6.3.2.-) (RING finger protein 13)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[461]	Q8NHY2	E3 ubiquitin-protein ligase RFWD2 (EC 6.3.2.-) (Constitutive photomorphogenesis protein 1 homolog) (hCOP1) (RING finger and WD repeat domain protein 2) (RING finger protein 200)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[462]	Q9BV68	E3 ubiquitin-protein ligase RNF126 (EC 6.3.2.-) (RING finger protein 126)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[463]	Q8TEB7	E3 ubiquitin-protein ligase RNF128 (EC 6.3.2.-) (Gene related to anergy in lymphocytes protein) (GRAIL) (RING finger protein 128)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[464]	Q8NC42	E3 ubiquitin-protein ligase RNF149 (EC 6.3.2.-) (DNA polymerase-transactivated protein 2) (RING finger protein 149)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[465]	Q96F44	E3 ubiquitin-protein ligase TRIM11 (EC 6.3.2.-) (Protein BIA1) (RING finger protein 92) (Tripartite motif-containing protein 11)	ligase activity [GO:0016874]; ubiquitin protein ligase activity [GO:0061630]; zinc ion binding [GO:0008270]
[466]	Q86YT6	E3 ubiquitin-protein ligase MIB1 (EC 6.3.2.-) (DAPK-interacting protein 1) (DIP-1) (Mind bomb homolog 1) (Zinc finger ZZ type with ankyrin repeat domain protein 2)	ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[467]	Q86XS8	E3 ubiquitin-protein ligase RNF130 (EC 6.3.2.-) (Goliath homolog) (H-Goliath) (RING finger protein 130)	ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[468]	Q9P0P0	E3 ubiquitin-protein ligase RNF181 (EC 6.3.2.-) (RING finger protein 181)	ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[469]	Q9H0F5	E3 ubiquitin-protein ligase RNF38 (EC 6.3.2.-) (RING finger protein 38)	ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[470]	Q6Q0C0	E3 ubiquitin-protein ligase TRAF7 (EC 6.3.2.-) (RING finger and WD repeat-containing protein 1) (RING finger protein 119) (TNF receptor-associated factor 7)	ligase activity [GO:0016874]; ubiquitin-protein transferase activity [GO:0004842]; zinc ion binding [GO:0008270]
[471]	Q8WVZ7	E3 ubiquitin-protein ligase RNF133 (EC 6.3.2.-) (RING finger protein 133)	ligase activity [GO:0016874]; zinc ion binding [GO:0008270]
[472]	Q13434	Putative E3 ubiquitin-protein ligase makorin-4 (EC 6.3.2.-) (Makorin RING finger protein pseudogene 4) (Makorin RING finger protein pseudogene 5) (RING finger protein 64) (Zinc finger protein 127-	ligase activity [GO:0016874]; zinc ion binding [GO:0008270]

		Xp) (ZNF127-Xp) (Zinc finger protein 127-like 1)	
[473]	Q8IUH4	Palmitoyltransferase ZDHHC13 (EC 2.3.1.225) (Huntingtin-interacting protein 14-related protein) (HIP14-related protein) (Huntingtin-interacting protein HIP3RP) (Putative MAPK-activating protein PM03) (Putative NF-kappa-B-activating protein 209) (Zinc finger DHHC domain-containing protein 13) (DHHC-13)	magnesium ion transmembrane transporter activity [GO:0015095]; palmitoyltransferase activity [GO:0016409]; protein-cysteine S-palmitoyltransferase activity [GO:0019706]; signal transducer activity [GO:0004871]; zinc ion binding [GO:0008270]
[474]	Q8IWT0	Protein archease (Protein ZBTB8OS) (Zinc finger and BTB domain-containing opposite strand protein 8)	metal ion binding [GO:0046872]
[475]	P57071	PR domain zinc finger protein 15 (EC 2.1.1.-) (PR domain-containing protein 15) (Zinc finger protein 298)	metal ion binding [GO:0046872]; methyltransferase activity [GO:0008168]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[476]	Q8NCW5	NAD(P)H-hydrate epimerase (EC 5.1.99.6) (Apolipoprotein A-I-binding protein) (AI-BP) (NAD(P)HX epimerase) (YjeF N-terminal domain-containing protein 1) (YjeF_N1)	metal ion binding [GO:0046872]; NADHX epimerase activity [GO:0052856]; NADPHX epimerase activity [GO:0052857]; nucleotide binding [GO:0000166]
[477]	Q96SL8	Flt3-interacting zinc finger protein 1 (Zinc finger protein 798)	metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]; receptor tyrosine kinase binding [GO:0030971]
[478]	Q9P2R3	Rabankyrin-5 (Rank-5) (Ankyrin repeat and FYVE domain-containing protein 1) (Ankyrin repeats hooked to a zinc finger motif)	metal ion binding [GO:0046872]; phosphatidylinositol phosphate binding [GO:1901981]; Rab GTPase binding [GO:0017137]
[479]	O60346	PH domain leucine-rich repeat-containing protein phosphatase 1 (EC 3.1.3.16) (Pleckstrin homology domain-containing family E member 1) (PH domain-containing family E member 1) (Suprachiasmatic nucleus circadian oscillatory protein) (hSCOP)	metal ion binding [GO:0046872]; phosphoprotein phosphatase activity [GO:0004721]
[480]	P29083	General transcription factor IIE subunit 1 (General transcription factor IIE 56 kDa subunit) (Transcription initiation factor IIE subunit alpha) (TFIIE-alpha)	metal ion binding [GO:0046872]; RNA polymerase II core binding [GO:0000993]; sequence-specific DNA binding [GO:0043565]; TFIIEH-class transcription factor binding [GO:0001097]; transcription factor activity, core RNA polymerase II binding [GO:0000991]; transcription factor activity, RNA polymerase II transcription factor binding [GO:0001076]
[481]	Q6ZN08	Putative zinc finger protein 66 (Zinc finger protein 66 pseudogene)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[482]	Q6ZMV8	Putative zinc finger protein 730	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[483]	O43296	Zinc finger protein 264	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[484]	Q9H8G1	Zinc finger protein 430	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[485]	Q14592	Zinc finger protein 460 (Zinc finger protein 272) (Zinc finger protein HZF8)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[486]	Q96JC4	Zinc finger protein 479 (Zinc finger protein Kr19) (HKr19)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[487]	Q96H40	Zinc finger protein 486 (KRAB domain only protein 2)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region

			sequence-specific DNA binding [GO:0000978]
[488]	Q9P255	Zinc finger protein 492 (Zinc finger protein 115)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[489]	Q5JVG8	Zinc finger protein 506	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[490]	Q08ER8	Zinc finger protein 543	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[491]	Q68DY1	Zinc finger protein 626	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[492]	Q8N3J9	Zinc finger protein 664 (Zinc finger protein 176) (Zinc finger protein from organ of Corti)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[493]	Q8N7Q3	Zinc finger protein 676	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[494]	Q8NEM1	Zinc finger protein 680	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[495]	O95780	Zinc finger protein 682	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[496]	P17019	Zinc finger protein 708 (Zinc finger protein 15) (Zinc finger protein 15-like 1) (Zinc finger protein KOX8)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[497]	Q96N38	Zinc finger protein 714	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[498]	O75373	Zinc finger protein 737 (Zinc finger protein 102)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[499]	Q5CZA5	Zinc finger protein 805	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]
[500]	Q9H116	GDNF-inducible zinc finger protein 1 (Zinc finger and BTB domain-containing protein 23) (Zinc finger protein 336)	metal ion binding [GO:0046872]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; RNA polymerase II distal enhancer sequence-specific DNA binding [GO:0000980]; sequence-specific DNA binding [GO:0043565]; transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001078]; transcriptional repressor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0001206]
[501]	Q9UK33	Zinc finger protein 580 (LDL-induced EC protein)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]
[502]	O43829	Zinc finger and BTB domain-containing protein 14 (Zinc finger protein 161 homolog) (Zfp-161) (Zinc finger protein 478) (Zinc finger protein 5 homolog) (ZF5) (Zfp-5) (hZF5)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; sequence-specific DNA binding [GO:0043565]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription regulatory region DNA binding [GO:0044212]
[503]	P17040	Zinc finger and SCAN domain-containing protein 20 (Zinc finger protein 31) (Zinc finger protein 360) (Zinc finger protein KOX29)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding

			[GO:0003700]
[504]	Q9HCX3	Zinc finger protein 304	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[505]	Q96HQ0	Zinc finger protein 419	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[506]	Q96NI8	Zinc finger protein 570	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[507]	Q96ND8	Zinc finger protein 583 (Zinc finger protein L3-5)	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[508]	Q6AZW8	Zinc finger protein 660	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[509]	Q5VV52	Zinc finger protein 691	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[510]	Q68DY9	Zinc finger protein 772	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[511]	Q3KQV3	Zinc finger protein 792	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[512]	P08048	Zinc finger Y-chromosomal protein	metal ion binding [GO:0046872]; RNA polymerase II regulatory region sequence-specific DNA binding [GO:0000977]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[513]	P05156	Complement factor I (EC 3.4.21.45) (C3B/C4B inactivator) [Cleaved into: Complement factor I heavy chain; Complement factor I light chain]	metal ion binding [GO:0046872]; scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]
[514]	Q9UNI1	Chymotrypsin-like elastase family member 1 (EC 3.4.21.36) (Elastase-1) (Pancreatic elastase 1)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]
[515]	P06681	Complement C2 (EC 3.4.21.43) (C3/C5 convertase) [Cleaved into: Complement C2b fragment; Complement C2a fragment]	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]
[516]	Q7RTY7	Ovochymase-1 (EC 3.4.21.-)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]
[517]	Q7RTZ1	Ovochymase-2 (EC 3.4.21.-) (Oviductin)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]
[518]	Q8NHM4	Putative trypsin-6 (EC 3.4.21.4) (Serine protease 3 pseudogene 2) (Trypsinogen C)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]
[519]	P07477	Trypsin-1 (EC 3.4.21.4) (Beta-trypsin) (Cationic trypsinogen) (Serine protease 1) (Trypsin I)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]

		[Cleaved into: Alpha-trypsin chain 1; Alpha-trypsin chain 2]	
[520]	Q9Y5K2	Kallikrein-4 (EC 3.4.21.-) (Enamel matrix serine proteinase 1) (Kallikrein-like protein 1) (KLK-L1) (Prostase) (Serine protease 17)	metal ion binding [GO:0046872]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[521]	Q99549	M-phase phosphoprotein 8 (Two hybrid-associated protein 3 with RanBPM) (Twa3)	methylated histone binding [GO:0035064]
[522]	Q8N3J2	Methyltransferase-like protein 4 (EC 2.1.1.-)	methyltransferase activity [GO:0008168]; nucleic acid binding [GO:0003676]
[523]	P00748	Coagulation factor XII (EC 3.4.21.38) (Hageman factor) (HAF) [Cleaved into: Coagulation factor XIIa heavy chain; Beta-factor XIIa part 1; Coagulation factor XIIa light chain (Beta-factor XIIa part 2)]	misfolded protein binding [GO:0051787]; serine-type aminopeptidase activity [GO:0070009]; serine-type endopeptidase activity [GO:0004252]
[524]	O95271	Tankyrase-1 (TANK1) (EC 2.4.2.30) (ADP-ribosyltransferase diphtheria toxin-like 5) (ARTD5) (Poly [ADP-ribose] polymerase 5A) (TNKS-1) (TRF1-interacting ankyrin-related ADP-ribose polymerase) (Tankyrase I)	NAD+ ADP-ribosyltransferase activity [GO:0003950]; zinc ion binding [GO:0008270]
[525]	Q9P0M2	A-kinase anchor protein 7 isoform gamma (AKAP-7 isoform gamma) (A-kinase anchor protein 18 kDa) (AKAP 18) (Protein kinase A-anchoring protein 7 isoform gamma) (PRKA7 isoform gamma)	nucleotide binding [GO:0000166]; protein kinase A binding [GO:0051018]
[526]	Q9ULH0	Kinase D-interacting substrate of 220 kDa (Ankyrin repeat-rich membrane-spanning protein)	PDZ domain binding [GO:0030165]; protein kinase regulator activity [GO:0019887]
[527]	Q2TV78	Putative macrophage stimulating 1-like protein (Brain rescue factor 1) (BRF-1) (Hepatocyte growth factor-like protein homolog)	peptidase activity [GO:0008233]
[528]	Q9H3S3	Transmembrane protease serine 5 (EC 3.4.21.-) (Spinesin)	peptidase activity [GO:0008233]; scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]
[529]	Q99895	Chymotrypsin-C (EC 3.4.21.2) (Caldecrin)	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]
[530]	P08861	Chymotrypsin-like elastase family member 3B (EC 3.4.21.70) (Elastase IIIB) (Elastase-3B) (Protease E)	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]
[531]	O60235	Transmembrane protease serine 11D (EC 3.4.21.-) (Airway trypsin-like protease) [Cleaved into: Transmembrane protease serine 11D non-catalytic chain; Transmembrane protease serine 11D catalytic chain]	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]
[532]	Q9UKR0	Kallikrein-12 (EC 3.4.21.-) (Kallikrein-like protein 5) (KLK-L5)	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[533]	Q9Y337	Kallikrein-5 (EC 3.4.21.-) (Kallikrein-like protein 2) (KLK-L2) (Stratum corneum tryptic enzyme)	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[534]	P49862	Kallikrein-7 (hK7) (EC 3.4.21.117) (Serine protease 6) (Stratum corneum chymotryptic enzyme) (hSCCE)	peptidase activity [GO:0008233]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[535]	P55199	RNA polymerase II elongation factor ELL (Eleven-nineteen lysine-rich leukemia protein)	phosphatase binding [GO:0019902]
[536]	O60733	85/88 kDa calcium-independent phospholipase A2 (CaI-PLA2) (EC 3.1.1.4) (Group VI phospholipase A2) (GVI PLA2) (Intracellular membrane-associated calcium-independent phospholipase A2 beta) (iPLA2-beta) (Patatin-like phospholipase domain-containing protein 9) (PNPLA9)	phospholipase A2 activity [GO:0004623]
[537]	Q92636	Protein FAN (Factor associated with neutral sphingomyelinase activation) (Factor associated with N-SMase activation)	phospholipid binding [GO:0005543]; receptor signaling protein activity [GO:0005057]



[538]	Q9Y4P3	Transducin beta-like protein 2 (WS beta-transducin repeats protein) (WS-betaTRP) (Williams-Beuren syndrome chromosomal region 13 protein)	phosphoprotein binding [GO:0051219]; poly(A) RNA binding [GO:0044822]; protein kinase binding [GO:0019901]; translation initiation factor binding [GO:0031369]
[539]	O95163	Elongator complex protein 1 (ELP1) (IkappaB kinase complex-associated protein) (IKK complex-associated protein) (p150)	phosphorylase kinase regulator activity [GO:0008607]; signal transducer activity [GO:0004871]
[540]	P0CG48	Polyubiquitin-C [Cleaved into: Ubiquitin]	poly(A) RNA binding [GO:0044822]; protease binding [GO:0002020]
[541]	Q16625	Occludin	protein domain specific binding [GO:0019904]; thiopurine S-methyltransferase activity [GO:0008119]
[542]	P12544	Granzyme A (EC 3.4.21.78) (CTL tryptase) (Cytotoxic T-lymphocyte proteinase 1) (Fragmentin-1) (Granzyme-1) (Hanukkah factor) (H factor) (HF)	protein homodimerization activity [GO:0042803]; serine-type endopeptidase activity [GO:0004252]
[543]	Q8N1B3	Cyclin-related protein FAM58A (CDK10-activating cyclin) (Cyclin-M)	protein kinase activator activity [GO:0030295]
[544]	Q6NXT1	Ankyrin repeat domain-containing protein 54 (Lyn-interacting ankyrin repeat protein)	protein kinase regulator activity [GO:0019887]
[545]	Q9UJX4	Anaphase-promoting complex subunit 5 (APC5) (Cyclosome subunit 5)	protein phosphatase binding [GO:0019903]
[546]	Q96I34	Protein phosphatase 1 regulatory subunit 16A (Myosin phosphatase-targeting subunit 3)	protein phosphatase type 1 regulator activity [GO:0008599]
[547]	Q3MIX3	Uncharacterized aarF domain-containing protein kinase 5 (EC 2.7.11.-)	protein serine/threonine kinase activity [GO:0004674]
[548]	Q15306	Interferon regulatory factor 4 (IRF-4) (Lymphocyte-specific interferon regulatory factor) (LSIRF) (Multiple myeloma oncogene 1) (NF-EM5)	protein-lysine N-methyltransferase activity [GO:0016279]; RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; sequence-specific DNA binding [GO:0043565]; transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding [GO:0001077]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; transcription factor binding [GO:0008134]
[549]	Q8TDJ6	DmX-like protein 2 (Rabconnectin-3)	Rab GTPase binding [GO:0017137]
[550]	Q96LT7	Protein C9orf72	Rab GTPase binding [GO:0017137]
[551]	Q02556	Interferon regulatory factor 8 (IRF-8) (Interferon consensus sequence-binding protein) (H-ICSBP) (ICSBP)	regulatory region DNA binding [GO:0000975]; transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding [GO:0003705]
[552]	Q16576	Histone-binding protein RBBP7 (Histone acetyltransferase type B subunit 2) (Nucleosome-remodeling factor subunit RBAP46) (Retinoblastoma-binding protein 7) (RBBP-7) (Retinoblastoma-binding protein p46)	RNA binding [GO:0003723]
[553]	Q03938	Zinc finger protein 90 (Zinc finger protein HTF9)	RNA polymerase II core promoter proximal region sequence-specific DNA binding [GO:0000978]; transcription factor activity, sequence-specific DNA binding [GO:0003700]; zinc ion binding [GO:0008270]
[554]	Q9Y3C7	Mediator of RNA polymerase II transcription subunit 31 (Mediator complex subunit 31) (Mediator complex subunit SOH1) (hSOH1)	RNA polymerase II transcription cofactor activity [GO:0001104]; transcription coactivator activity [GO:0003713]; ubiquitin protein ligase activity [GO:0061630]
[555]	Q9BYE2	Transmembrane protease serine 13 (EC 3.4.21.-) (Membrane-type mosaic serine protease) (Mosaic serine protease)	scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]
[556]	Q9NRS4	Transmembrane protease serine 4 (EC 3.4.21.-) (Channel-activating protease 2) (CAHP2)	scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]

		(Membrane-type serine protease 2) (MT-SP2)	
[557]	P56730	Neurotrypsin (EC 3.4.21.-) (Leydin) (Motopsin) (Serine protease 12)	scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[558]	O15393	Transmembrane protease serine 2 (EC 3.4.21.-) (Serine protease 10) [Cleaved into: Transmembrane protease serine 2 non-catalytic chain; Transmembrane protease serine 2 catalytic chain]	scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[559]	P57727	Transmembrane protease serine 3 (EC 3.4.21.-) (Serine protease TADG-12) (Tumor-associated differentially-expressed gene 12 protein)	scavenger receptor activity [GO:0005044]; serine-type endopeptidase activity [GO:0004252]; sodium channel regulator activity [GO:0017080]
[560]	P08217	Chymotrypsin-like elastase family member 2A (EC 3.4.21.71) (Elastase-2A)	serine hydrolase activity [GO:0017171]; serine-type endopeptidase activity [GO:0004252]
[561]	Q9Y5Q5	Atrial natriuretic peptide-converting enzyme (EC 3.4.21.-) (Corin) (Heart-specific serine proteinase ATC2) (Pro-ANP-converting enzyme) (Transmembrane protease serine 10) [Cleaved into: Atrial natriuretic peptide-converting enzyme, N-terminal propeptide; Atrial natriuretic peptide-converting enzyme, activated protease fragment; Atrial natriuretic peptide-converting enzyme, 180 kDa soluble fragment; Atrial natriuretic peptide-converting enzyme, 160 kDa soluble fragment; Atrial natriuretic peptide-converting enzyme, 100 kDa soluble fragment]	serine-type endopeptidase activity [GO:0004252]
[562]	Q9GZN4	Brain-specific serine protease 4 (BSSP-4) (EC 3.4.21.-) (Serine protease 22) (Serine protease 26) (Trypsin epsilon)	serine-type endopeptidase activity [GO:0004252]
[563]	P08218	Chymotrypsin-like elastase family member 2B (EC 3.4.21.71) (Elastase-2B)	serine-type endopeptidase activity [GO:0004252]
[564]	P09093	Chymotrypsin-like elastase family member 3A (EC 3.4.21.70) (Elastase IIIA) (Elastase-3A) (Protease E)	serine-type endopeptidase activity [GO:0004252]
[565]	P40313	Chymotrypsin-like protease CTRL-1 (EC 3.4.21.-)	serine-type endopeptidase activity [GO:0004252]
[566]	Q9NZP8	Complement C1r subcomponent-like protein (C1r-LP) (C1r-like protein) (EC 3.4.21.-) (C1r-like serine protease analog protein) (CLSPa)	serine-type endopeptidase activity [GO:0004252]
[567]	P06870	Kallikrein-1 (EC 3.4.21.35) (Kidney/pancreas/salivary gland kallikrein) (Tissue kallikrein)	serine-type endopeptidase activity [GO:0004252]
[568]	Q9P0G3	Kallikrein-14 (hK14) (EC 3.4.21.-) (Kallikrein-like protein 6) (KLK-L6)	serine-type endopeptidase activity [GO:0004252]
[569]	Q92876	Kallikrein-6 (EC 3.4.21.-) (Neurosin) (Protease M) (SP59) (Serine protease 18) (Serine protease 9) (Zyme)	serine-type endopeptidase activity [GO:0004252]
[570]	O60259	Kallikrein-8 (hK8) (EC 3.4.21.118) (Neuropsin) (NP) (Ovasin) (Serine protease 19) (Serine protease TADG-14) (Tumor-associated differentially expressed gene 14 protein)	serine-type endopeptidase activity [GO:0004252]
[571]	P03952	Plasma kallikrein (EC 3.4.21.34) (Fletcher factor) (Kininogenin) (Plasma prekallikrein) (PKK) [Cleaved into: Plasma kallikrein heavy chain; Plasma kallikrein light chain]	serine-type endopeptidase activity [GO:0004252]
[572]	A6NIE9	Putative serine protease 29 (EC 3.4.21.-) (Implantation serine proteinase 2-like protein) (ISP2-like protein)	serine-type endopeptidase activity [GO:0004252]
[573]	E5RG02	Putative serine protease 46 (EC 3.4.21.-)	serine-type endopeptidase activity [GO:0004252]
[574]	A8MTI9	Putative serine protease 47 (EC 3.4.21.-)	serine-type endopeptidase activity [GO:0004252]
[575]	Q9BQR3	Serine protease 27 (EC 3.4.21.-) (Marapsin) (Pancreasin)	serine-type endopeptidase activity [GO:0004252]

[576]	Q8NF86	Serine protease 33 (EC 3.4.21.-) (Serine protease EOS)	serine-type endopeptidase activity [GO:0004252]
[577]	A1L453	Serine protease 38 (EC 3.4.21.-) (Marapsin-2)	serine-type endopeptidase activity [GO:0004252]
[578]	Q7Z5A4	Serine protease 42 (EC 3.4.21.-) (Testis serine protease 2)	serine-type endopeptidase activity [GO:0004252]
[579]	E7EML9	Serine protease 44 (EC 3.4.21.-) (Testis serine protease 4) (TESSP-4)	serine-type endopeptidase activity [GO:0004252]
[580]	Q7RTY3	Serine protease 45 (EC 3.4.21.-) (Testis serine protease 5)	serine-type endopeptidase activity [GO:0004252]
[581]	Q7RTY5	Serine protease 48 (EC 3.4.21.-) (Epidermis-specific serine protease-like protein)	serine-type endopeptidase activity [GO:0004252]
[582]	Q6UWB4	Serine protease 55 (EC 3.4.21.-) (Testis serine protease 1) (T-SP1)	serine-type endopeptidase activity [GO:0004252]
[583]	P0CW18	Serine protease 56 (EC 3.4.21.-)	serine-type endopeptidase activity [GO:0004252]
[584]	Q8IYP2	Serine protease 58 (EC 3.4.21.4) (Trypsin-X3)	serine-type endopeptidase activity [GO:0004252]
[585]	Q6ZMR5	Transmembrane protease serine 11A (EC 3.4.21.-) (Airway trypsin-like protease 1) (Epidermal type-II transmembrane serine protease) (Esophageal cancer-susceptibility gene 1 protein)	serine-type endopeptidase activity [GO:0004252]
[586]	Q6ZWK6	Transmembrane protease serine 11F (EC 3.4.21.-) (Airway trypsin-like protease 4)	serine-type endopeptidase activity [GO:0004252]
[587]	Q86WS5	Transmembrane protease serine 12 (EC 3.4.21.-)	serine-type endopeptidase activity [GO:0004252]
[588]	Q8IU80	Transmembrane protease serine 6 (EC 3.4.21.-) (Matriptase-2)	serine-type endopeptidase activity [GO:0004252]
[589]	Q7Z410	Transmembrane protease serine 9 (EC 3.4.21.-) (Polyserase-I) (Polyserine protease 1) (Polyserase-1) [Cleaved into: Serase-1; Serase-2; Serase-3]	serine-type endopeptidase activity [GO:0004252]
[590]	P00749	Urokinase-type plasminogen activator (U-plasminogen activator) (uPA) (EC 3.4.21.73) [Cleaved into: Urokinase-type plasminogen activator long chain A; Urokinase-type plasminogen activator short chain A; Urokinase-type plasminogen activator chain B]	serine-type endopeptidase activity [GO:0004252]
[591]	P00746	Complement factor D (EC 3.4.21.46) (Adipsin) (C3 convertase activator) (Properdin factor D)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[592]	P49863	Granzyme K (EC 3.4.21.-) (Fragmentin-3) (Granzyme-3) (NK-tryptase-2) (NK-Tryp-2)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[593]	P51124	Granzyme M (EC 3.4.21.-) (Met-1 serine protease) (Hu-Met-1) (Met-ase) (Natural killer cell granular protease)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[594]	Q04756	Hepatocyte growth factor activator (HGF activator) (HGFA) (EC 3.4.21.-) [Cleaved into: Hepatocyte growth factor activator short chain; Hepatocyte growth factor activator long chain]	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[595]	O43240	Kallikrein-10 (EC 3.4.21.-) (Normal epithelial cell-specific 1) (Protease serine-like 1)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[596]	Q9UBX7	Kallikrein-11 (hK11) (EC 3.4.21.-) (Hippostasin) (Serine protease 20) (Trypsin-like protease) [Cleaved into: Kallikrein-11 inactive chain 1; Kallikrein-11 inactive chain 2]	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[597]	Q9H2R5	Kallikrein-15 (EC 3.4.21.-) (ACO protease)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[598]	Q16651	Prostasin (EC 3.4.21.-) (Channel-activating protease 1) (CAP1) (Serine protease 8) [Cleaved into: Prostasin light chain; Prostasin heavy chain]	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[599]	Q9Y5Y6	Suppressor of tumorigenicity 14 protein (EC 3.4.21.109) (Matriptase) (Membrane-type serine protease 1) (MT-SP1) (Prostamin) (Serine protease 14) (Serine protease TADG-15) (Tumor-associated differentially-expressed gene 15 protein)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]

[600]	Q86T26	Transmembrane protease serine 11B (EC 3.4.21.-) (Airway trypsin-like protease 5)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[601]	Q9UL52	Transmembrane protease serine 11E (EC 3.4.21.-) (Serine protease DESC1) (Transmembrane protease serine 11E2) [Cleaved into: Transmembrane protease serine 11E non-catalytic chain; Transmembrane protease serine 11E catalytic chain]	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[602]	Q7RTY8	Transmembrane protease serine 7 (EC 3.4.21.-) (Matriptase-3)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[603]	Q15661	Tryptase alpha/beta-1 (Tryptase-1) (EC 3.4.21.59) (Tryptase I) (Tryptase alpha-1)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[604]	P20231	Tryptase beta-2 (Tryptase-2) (EC 3.4.21.59) (Tryptase II)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[605]	Q9BZJ3	Tryptase delta (EC 3.4.21.59) (Delta-tryptase) (HmMCP-3-like tryptase III) (Mast cell mMCP-7-like) (Tryptase-3)	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[606]	Q9NRR2	Tryptase gamma (EC 3.4.21.-) (Serine protease 31) (Transmembrane tryptase) [Cleaved into: Tryptase gamma light chain; Tryptase gamma heavy chain]	serine-type endopeptidase activity [GO:0004252]; serine-type peptidase activity [GO:0008236]
[607]	Q9UI38	Probable threonine protease PRSS50 (EC 3.4.25.-) (Cancer/testis antigen 20) (Serine protease 50) (Testis-specific protease-like protein 50)	threonine-type endopeptidase activity [GO:0004298]
[608]	O75529	TAF5-like RNA polymerase II p300/CBP-associated factor-associated factor 65 kDa subunit 5L (PCAF-associated factor 65 beta) (PAF65-beta)	transcription coactivator activity [GO:0003713]; transcription factor activity, sequence-specific DNA binding [GO:0003700]
[609]	O75832	26S proteasome non-ATPase regulatory subunit 10 (26S proteasome regulatory subunit p28) (Gankyrin) (p28(GANK))	transcription factor binding [GO:0008134]
[610]	Q96Q27	Ankyrin repeat and SOCS box protein 2 (ASB-2)	ubiquitin protein ligase activity [GO:0061630]
[611]	P24863	Cyclin-C (SRB11 homolog) (hSRB11)	ubiquitin protein ligase activity [GO:0061630]
[612]	Q9NPI8	Fanconi anemia group F protein (Protein FAF)	ubiquitin protein ligase activity [GO:0061630]
[613]	Q9UKB1	F-box/WD repeat-containing protein 11 (F-box and WD repeats protein beta-TrCP2) (F-box/WD repeat-containing protein 1B) (Homologous to Slimb protein) (HOS)	ubiquitin protein ligase activity [GO:0061630]; ubiquitin-protein transferase activity [GO:0004842]
[614]	Q15843	NEDD8 (Neddylin) (Neural precursor cell expressed developmentally down-regulated protein 8) (NEDD-8) (Ubiquitin-like protein Nedd8)	ubiquitin protein ligase binding [GO:0031625]
[615]	Q9UKT8	F-box/WD repeat-containing protein 2 (F-box and WD-40 domain-containing protein 2) (Protein MD6)	ubiquitin-protein transferase activity [GO:0004842]
[616]	Q8N9V3	WD repeat, SAM and U-box domain-containing protein 1	ubiquitin-protein transferase activity [GO:0004842]
[617]	Q9NWT8	Aurora kinase A-interacting protein (AURKA-interacting protein) (28S ribosomal protein S38, mitochondrial) (MRP-S38)	
[618]	Q8TE02	Elongator complex protein 5 (Dermal papilla-derived protein 6) (S-phase 2 protein)	
[619]	Q5XX13	F-box/WD repeat-containing protein 10 (F-box and WD-40 domain-containing protein 10) (Ubiquitin ligase-specificity factor)	
[620]	Q6UXH9	Inactive serine protease PAMR1 (Peptidase domain-containing protein associated with muscle regeneration 1) (Regeneration-associated muscle protease homolog)	
[621]	Q9NWT1	p21-activated protein kinase-interacting protein 1 (PAK/PLC-interacting protein 1) (hPIP1) (PAK1-interacting protein 1) (WD repeat-containing protein 84)	
[622]	Q9BRP4	Proteasomal ATPase-associated factor 1 (Protein G-16) (WD repeat-containing protein 71)	
[623]	Q9BZL4	Protein phosphatase 1 regulatory subunit 12C (Protein phosphatase 1 myosin-binding subunit of 85 kDa) (Protein phosphatase 1 myosin-binding subunit p85)	
[624]	O00472	RNA polymerase II elongation factor ELL2	
[625]	Q9H6T3	RNA polymerase II-associated protein 3	
[626]	Q8WVC0	RNA polymerase-associated protein LEO1 (Replicative senescence down-regulated leo1-like protein)	

[627]	O15084	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A (PP6-ARS-A) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-A) (Ankyrin repeat domain-containing protein 28) (Phosphatase interactor targeting protein hnRNP K) (PITK)
[628]	Q8N8A2	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit B (PP6-ARS-B) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-B) (Ankyrin repeat domain-containing protein 44)
[629]	Q8NB46	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit C (PP6-ARS-C) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-C) (Ankyrin repeat domain-containing protein 52)
[630]	P78324	Tyrosine-protein phosphatase non-receptor type substrate 1 (SHP substrate 1) (SHPS-1) (Brain Ig-like molecule with tyrosine-based activation motifs) (Bit) (CD172 antigen-like family member A) (Inhibitory receptor SHPS-1) (Macrophage fusion receptor) (MyD-1 antigen) (Signal-regulatory protein alpha-1) (Sirp-alpha-1) (Signal-regulatory protein alpha-2) (Sirp-alpha-2) (Signal-regulatory protein alpha-3) (Sirp-alpha-3) (p84) (CD antigen CD172a)

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### Other proteins

Serial number	Entry	Protein name	GO annotation (molecular function)
[1]	Q8IWB7	WD repeat and FYVE domain-containing protein 1 (FENS-1) (Phosphoinositide-binding protein 1) (WD40- and FYVE domain-containing protein 1) (Zinc finger FYVE domain-containing protein 17)	1-phosphatidylinositol binding [GO:0005545]; zinc ion binding [GO:0008270]
[2]	P57737	Coronin-7 (Crn7) (70 kDa WD repeat tumor rejection antigen homolog)	actin binding [GO:0003779]
[3]	Q9UQ03	Coronin-2B (Coronin-like protein C) (Clipin-C) (Protein FC96)	actin binding [GO:0003779]; actin filament binding [GO:0051015]
[4]	Q9ULV4	Coronin-1C (Coronin-3) (hCRNN4)	actin filament binding [GO:0051015]
[5]	Q92828	Coronin-2A (IR10) (WD repeat-containing protein 2)	actin filament binding [GO:0051015]
[6]	Q6QEF8	Coronin-6 (Coronin-like protein E) (Clipin-E)	actin filament binding [GO:0051015]
[7]	Q9BR76	Coronin-1B (Coronin-2)	actin filament binding [GO:0051015]; Arp2/3 complex binding [GO:0071933]; identical protein binding [GO:0042802]
[8]	B1AK53	Espin (Autosomal recessive deafness type 36 protein) (Ectoplasmic specialization protein)	actin filament binding [GO:0051015]; SH3 domain binding [GO:0017124]
[9]	P01876	Ig alpha-1 chain C region	antigen binding [GO:0003823]
[10]	P01877	Ig alpha-2 chain C region	antigen binding [GO:0003823]
[11]	P01880	Ig delta chain C region	antigen binding [GO:0003823]
[12]	P01854	Ig epsilon chain C region	antigen binding [GO:0003823]
[13]	P01834	Ig kappa chain C region	antigen binding [GO:0003823]
[14]	P0CG04	Ig lambda-1 chain C regions	antigen binding [GO:0003823]
[15]	P0CG05	Ig lambda-2 chain C regions	antigen binding [GO:0003823]
[16]	P0CG06	Ig lambda-3 chain C regions	antigen binding [GO:0003823]
[17]	P0CF74	Ig lambda-6 chain C region	antigen binding [GO:0003823]
[18]	A0M8Q6	Ig lambda-7 chain C region	antigen binding [GO:0003823]
[19]	P01871	Ig mu chain C region	antigen binding [GO:0003823]
[20]	P00738	Haptoglobin (Zonulin) [Cleaved into: Haptoglobin alpha chain; Haptoglobin beta chain]	antioxidant activity [GO:0016209]; hemoglobin binding [GO:0030492]
[21]	Q149M9	NACHT domain- and WD repeat-containing protein 1	ATP binding [GO:0005524]
[22]	Q14678	KN motif and ankyrin repeat domain-containing protein 1 (Ankyrin repeat domain-containing protein 15) (Kidney ankyrin repeat-containing protein)	beta-catenin binding [GO:0008013]
[23]	Q12955	Ankyrin-3 (ANK-3) (Ankyrin-G)	cadherin binding [GO:0045296]; cytoskeletal protein binding [GO:0008092]; ion channel

			binding [GO:0044325]; protein binding, bridging [GO:0030674]; spectrin binding [GO:0030507]; structural constituent of cytoskeleton [GO:0005200]
[24]	Q9NU02	Ankyrin repeat and EF-hand domain-containing protein 1 (Ankyrin repeat domain-containing protein 5)	calcium ion binding [GO:0005509]
[25]	Q9UM47	Neurogenic locus notch homolog protein 3 (Notch 3) [Cleaved into: Notch 3 extracellular truncation; Notch 3 intracellular domain]	calcium ion binding [GO:0005509]
[26]	O00423	Echinoderm microtubule-associated protein-like 1 (EMAP-1) (HuEMAP-1)	calcium ion binding [GO:0005509]; microtubule binding [GO:0008017]; tubulin binding [GO:0015631]
[27]	Q05BV3	Echinoderm microtubule-associated protein-like 5 (EMAP-5)	catalytic activity [GO:0003824]
[28]	Q8N145	Leucine-rich repeat LGI family member 3 (LGI1-like protein 4) (Leucine-rich glioma-inactivated protein 3)	catalytic activity [GO:0003824]
[29]	O75762	Transient receptor potential cation channel subfamily A member 1 (Ankyrin-like with transmembrane domains protein 1) (Transformation-sensitive protein p120)	channel activity [GO:0015267]; intracellular ligand-gated calcium channel activity [GO:0005218]; temperature-gated cation channel activity [GO:0097604]
[30]	P14210	Hepatocyte growth factor (Hepatopoietin-A) (Scatter factor) (SF) [Cleaved into: Hepatocyte growth factor alpha chain; Hepatocyte growth factor beta chain]	chemoattractant activity [GO:0042056]; growth factor activity [GO:0008083]; identical protein binding [GO:0042802]
[31]	O43155	Leucine-rich repeat transmembrane protein FLRT2 (Fibronectin-like domain-containing leucine-rich transmembrane protein 2)	chemorepellent activity [GO:0045499]; protein binding, bridging [GO:0030674]; receptor signaling protein activity [GO:0005057]
[32]	Q9NZU0	Leucine-rich repeat transmembrane protein FLRT3 (Fibronectin-like domain-containing leucine-rich transmembrane protein 3)	chemorepellent activity [GO:0045499]; protein binding, bridging [GO:0030674]; receptor signaling protein activity [GO:0005057]
[33]	Q12770	Sterol regulatory element-binding protein cleavage-activating protein (SCAP) (SREBP cleavage-activating protein)	cholesterol binding [GO:0015485]; unfolded protein binding [GO:0051082]
[34]	Q6UXN9	WD repeat-containing protein 82 (Protein TMEM113) (Swd2)	chromatin binding [GO:0003682]
[35]	P51884	Lumican (Keratan sulfate proteoglycan lumican) (KSPG lumican)	collagen binding [GO:0005518]; extracellular matrix structural constituent [GO:0005201]
[36]	Q8TF66	Leucine-rich repeat-containing protein 15 (Leucine-rich repeat protein induced by beta-amyloid homolog) (hLib)	collagen binding [GO:0005518]; fibronectin binding [GO:0001968]; laminin binding [GO:0043236]
[37]	Q9Y2C9	Toll-like receptor 6 (CD antigen CD286)	diacyl lipopeptide binding [GO:0042498]; lipopeptide binding [GO:0071723]; receptor activity [GO:0004872]; transmembrane signaling receptor activity [GO:0004888]
[38]	O60603	Toll-like receptor 2 (Toll/interleukin-1 receptor-like protein 4) (CD antigen CD282)	diacyl lipopeptide binding [GO:0042498]; lipopolysaccharide binding [GO:0001530]; lipopolysaccharide receptor activity [GO:0001875]; lipoteichoic acid binding [GO:0070891]; peptidoglycan binding [GO:0042834]; protein heterodimerization activity [GO:0046982]; receptor activity [GO:0004872]; signaling pattern recognition receptor activity [GO:0008329]; transmembrane signaling receptor activity [GO:0004888]; triacyl lipopeptide binding [GO:0042497]
[39]	Q562E7	WD repeat-containing protein 81	dynein binding [GO:0045502]; microtubule binding [GO:0008017]
[40]	Q7Z6G8	Ankyrin repeat and sterile alpha motif domain-containing protein 1B (Amyloid-beta protein intracellular domain-associated protein 1) (AIDA-	ephrin receptor binding [GO:0046875]

		1) (E2A-PBX1-associated protein) (EB-1)	
[41]	Q96T76	MMS19 nucleotide excision repair protein homolog (hMMS19) (MET18 homolog) (MMS19-like protein)	estrogen receptor binding [GO:0030331]; protein binding, bridging [GO:0030674]; receptor signaling complex scaffold activity [GO:0030159]; transcription coactivator activity [GO:0003713]
[42]	Q13541	Eukaryotic translation initiation factor 4E-binding protein 1 (4E-BP1) (eIF4E-binding protein 1) (Phosphorylated heat- and acid-stable protein regulated by insulin 1) (PHAS-I)	eukaryotic initiation factor 4E binding [GO:0008190]; translation repressor activity [GO:0030371]
[43]	Q13542	Eukaryotic translation initiation factor 4E-binding protein 2 (4E-BP2) (eIF4E-binding protein 2)	eukaryotic initiation factor 4E binding [GO:0008190]; translation repressor activity [GO:0030371]
[44]	O60516	Eukaryotic translation initiation factor 4E-binding protein 3 (4E-BP3) (eIF4E-binding protein 3)	eukaryotic initiation factor 4E binding [GO:0008190]; translation repressor activity [GO:0030371]
[45]	P21810	Biglycan (Bone/cartilage proteoglycan I) (PG-S1)	extracellular matrix binding [GO:0050840]; extracellular matrix structural constituent [GO:0005201]; glycosaminoglycan binding [GO:0005539]
[46]	Q9BR61	Acyl-CoA-binding domain-containing protein 6	fatty-acyl-CoA binding [GO:0000062]; lipid binding [GO:0008289]
[47]	P59768	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2 (G gamma-I)	G-protein beta-subunit binding [GO:0031681]; signal transducer activity [GO:0004871]
[48]	Q9HBX9	Relaxin receptor 1 (Leucine-rich repeat-containing G-protein coupled receptor 7) (Relaxin family peptide receptor 1)	G-protein coupled receptor activity [GO:0004930]; metal ion binding [GO:0046872]
[49]	Q9BXB1	Leucine-rich repeat-containing G-protein coupled receptor 4 (G-protein coupled receptor 48)	G-protein coupled receptor activity [GO:0004930]; transmembrane signaling receptor activity [GO:0004888]
[50]	O75473	Leucine-rich repeat-containing G-protein coupled receptor 5 (G-protein coupled receptor 49) (G-protein coupled receptor 67) (G-protein coupled receptor HG38)	G-protein coupled receptor activity [GO:0004930]; transmembrane signaling receptor activity [GO:0004888]
[51]	Entry	Protein names	Gene ontology (molecular function)
[52]	P00739	Haptoglobin-related protein	hemoglobin binding [GO:0030492]
[53]	Q13685	Angio-associated migratory cell protein	heparin binding [GO:0008201]
[54]	Q8N157	Jouberin (Abelson helper integration site 1 protein homolog) (AHI-1)	identical protein binding [GO:0042802]
[55]	Q8WWQ0	PH-interacting protein (PHIP) (IRS-1 PH domain-binding protein) (WD repeat-containing protein 11)	insulin receptor binding [GO:0005158]; lysine-acetylated histone binding [GO:0070577]
[56]	O60602	Toll-like receptor 5 (Toll/interleukin-1 receptor-like protein 3)	interleukin-1 receptor binding [GO:0005149]; transmembrane signaling receptor activity [GO:0004888]
[57]	Q9BQA1	Methylosome protein 50 (MEP-50) (Androgen receptor cofactor p44) (WD repeat-containing protein 77) (p44/Mep50)	ligand-dependent nuclear receptor transcription coactivator activity [GO:0030374]
[58]	O00206	Toll-like receptor 4 (hToll) (CD antigen CD284)	lipopolysaccharide binding [GO:0001530]; lipopolysaccharide receptor activity [GO:0001875]; receptor activity [GO:0004872]; transmembrane signaling receptor activity [GO:0004888]
[59]	Q9H9E1	Ankyrin repeat family A protein 2 (RFXANK-like protein 2)	low-density lipoprotein particle binding [GO:0030169]; transcription cofactor activity [GO:0003712]
[60]	Q6UWQ5	Lysozyme-like protein 1 (EC 3.2.1.17)	lysozyme activity [GO:0003796]
[61]	Q7Z4W2	Lysozyme-like protein 2 (Lysozyme-2) (EC 3.2.1.17)	lysozyme activity [GO:0003796]
[62]	Q96KX0	Lysozyme-like protein 4 (Lysozyme-4)	lysozyme activity [GO:0003796]
[63]	O75951	Lysozyme-like protein 6 (EC 3.2.1.17)	lysozyme activity [GO:0003796]

[64]	Q8IXA5	Sperm acrosome membrane-associated protein 3 (Cancer/testis antigen 54) (CT54) (Lysozyme-like acrosomal sperm-specific secretory protein ALLP-17) (Lysozyme-like protein 3) (Sperm lysozyme-like protein 1) (Sperm protein reactive with antisperm antibodies) (Sperm protein reactive with ASA) [Cleaved into: Sperm acrosome membrane-associated protein 3, membrane form; Sperm acrosome membrane-associated protein 3, processed form]	lysozyme activity [GO:0003796]
[65]	Q96QH8	Sperm acrosome-associated protein 5 (EC 3.2.1.17) (Lysozyme-like protein 5) (Sperm-specific lysozyme-like protein X) (SLLP-X)	lysozyme activity [GO:0003796]
[66]	Q9P2S6	Ankyrin repeat and MYND domain-containing protein 1 (Testis-specific ankyrin-like protein 1) (Zinc finger MYND domain-containing protein 13)	metal ion binding [GO:0046872]
[67]	Q8WW33	Gametocyte-specific factor 1 (Protein FAM112B)	metal ion binding [GO:0046872]
[68]	Q9H1H1	Gametocyte-specific factor 1-like (Protein FAM112A)	metal ion binding [GO:0046872]
[69]	Q96P53	WD repeat and FYVE domain-containing protein 2 (WD40- and FYVE domain-containing protein 2) (Zinc finger FYVE domain-containing protein 22)	metal ion binding [GO:0046872]
[70]	P0DKX0	Zinc finger protein 728	metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]
[71]	P98169	Zinc finger X-linked protein ZXDB	metal ion binding [GO:0046872]; nucleic acid binding [GO:0003676]
[72]	A6NKH3	Putative 60S ribosomal protein L37a-like protein (Ribosomal protein L37a pseudogene 8)	metal ion binding [GO:0046872]; structural constituent of ribosome [GO:0003735]
[73]	O14576	Cytoplasmic dynein 1 intermediate chain 1 (Cytoplasmic dynein intermediate chain 1) (Dynein intermediate chain 1, cytosolic) (DH IC-1)	microtubule binding [GO:0008017]; microtubule motor activity [GO:0003777]; motor activity [GO:0003774]; spectrin binding [GO:0030507]
[74]	Q9BVA0	Katanin p80 WD40 repeat-containing subunit B1 (Katanin p80 subunit B1) (p80 katanin)	microtubule binding [GO:0008017]; protein heterodimerization activity [GO:0046982]
[75]	O95834	Echinoderm microtubule-associated protein-like 2 (EMAP-2) (HuEMAP-2)	microtubule binding [GO:0008017]; tubulin binding [GO:0015631]
[76]	Q13409	Cytoplasmic dynein 1 intermediate chain 2 (Cytoplasmic dynein intermediate chain 2) (Dynein intermediate chain 2, cytosolic) (DH IC-2)	microtubule motor activity [GO:0003777]
[77]	Q9BZR6	Reticulon-4 receptor (Nogo receptor) (NgR) (Nogo-66 receptor)	neuregulin receptor activity [GO:0038131]; receptor activity [GO:0004872]
[78]	Q8N302	Angiogenic factor with G patch and FHA domains 1 (Angiogenic factor VG5Q) (hVG5Q) (G patch domain-containing protein 7) (Vasculogenesis gene on 5q protein)	nucleic acid binding [GO:0003676]
[79]	O95872	G patch domain and ankyrin repeat-containing protein 1 (Ankyrin repeat domain-containing protein 59) (G patch domain-containing protein 10) (HLA-B-associated transcript 4) (Protein G5)	nucleic acid binding [GO:0003676]
[80]	Q8N954	G patch domain-containing protein 11 (Coiled-coil domain-containing protein 75)	nucleic acid binding [GO:0003676]
[81]	Q8WUM0	Nuclear pore complex protein Nup133 (133 kDa nucleoporin) (Nucleoporin Nup133)	nucleocytoplasmic transporter activity [GO:0005487]
[82]	Q9UBI6	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12	PDZ domain binding [GO:0030165]; phosphate ion binding [GO:0042301]; signal transducer activity [GO:0004871]
[83]	Q8WXD0	Relaxin receptor 2 (G-protein coupled receptor 106) (G-protein coupled receptor affecting testicular descent) (Leucine-rich repeat-containing G-protein coupled receptor 8) (Relaxin family peptide receptor 2)	peptide hormone binding [GO:0017046]; protein-hormone receptor activity [GO:0016500]
[84]	P50851	Lipopolysaccharide-responsive and beige-like anchor protein (Beige-like protein) (CDC4-like	phospholipid binding [GO:0005543]



		protein)	
[85]	Q99698	Lysosomal-trafficking regulator (Beige homolog)	phospholipid binding [GO:0005543]
[86]	Q6ZS81	WD repeat- and FYVE domain-containing protein 4	phospholipid binding [GO:0005543]
[87]	Q86WK6	Amphoterin-induced protein 1 (AMIGO-1) (Alivin-2)	potassium channel regulator activity [GO:0015459]
[88]	Q2I0M4	Leucine-rich repeat-containing protein 26 (BK channel auxiliary gamma subunit LRRC26) (Cytokeratin-associated protein in cancer)	potassium channel regulator activity [GO:0015459]
[89]	O15205	Ubiquitin D (Diubiquitin) (Ubiquitin-like protein FAT10)	proteasome binding [GO:0070628]
[90]	O94901	SUN domain-containing protein 1 (Protein unc-84 homolog A) (Sad1/unc-84 protein-like 1)	protein anchor [GO:0043495]
[91]	Q9NZU1	Leucine-rich repeat transmembrane protein FLRT1 (Fibronectin-like domain-containing leucine-rich transmembrane protein 1)	protein binding, bridging [GO:0030674]; receptor signaling protein activity [GO:0005057]
[92]	Q9HAV0	Guanine nucleotide-binding protein subunit beta-4 (Transducin beta chain 4)	protein complex binding [GO:0032403]; signal transducer activity [GO:0004871]
[93]	P52657	Transcription initiation factor IIA subunit 2 (General transcription factor IIA subunit 2) (TFIIA p12 subunit) (TFIIA-12) (TFIIAS) (Transcription initiation factor IIA gamma chain) (TFIIA-gamma)	protein heterodimerization activity [GO:0046982]; protein homodimerization activity [GO:0042803]; TBP-class protein binding [GO:0017025]; transcription coactivator activity [GO:0003713]; transcription factor binding [GO:0008134]
[94]	Q15399	Toll-like receptor 1 (Toll/interleukin-1 receptor-like protein) (TIL) (CD antigen CD281)	protein heterodimerization activity [GO:0046982]; receptor activity [GO:0004872]; transmembrane signaling receptor activity [GO:0004888]
[95]	Q8IW40	Coiled-coil domain-containing protein 103	protein homodimerization activity [GO:0042803]
[96]	P05161	Ubiquitin-like protein ISG15 (Interferon-induced 15 kDa protein) (Interferon-induced 17 kDa protein) (IP17) (Ubiquitin cross-reactive protein) (hUCRP)	protein tag [GO:0031386]
[97]	Q86UN2	Reticulon-4 receptor-like 1 (Nogo receptor-like 2) (Nogo-66 receptor homolog 2) (Nogo-66 receptor-related protein 3) (NgR3)	receptor activity [GO:0004872]
[98]	Q8WWH4	Ankyrin repeat, SAM and basic leucine zipper domain-containing protein 1 (Ankyrin-like protein 1) (Germ cell-specific ankyrin, SAM and basic leucine zipper domain-containing protein)	signal transducer activity [GO:0004871]
[99]	P50150	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-4	signal transducer activity [GO:0004871]
[100]	O60262	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-7	signal transducer activity [GO:0004871]
[101]	Q15653	NF-kappa-B inhibitor beta (NF-kappa-BIB) (I-kappa-B-beta) (Ikb-B) (Ikb-beta) (IkappaBbeta) (Thyroid receptor-interacting protein 9) (TR-interacting protein 9) (TRIP-9)	signal transducer activity [GO:0004871]; transcription coactivator activity [GO:0003713]
[102]	O75694	Nuclear pore complex protein Nup155 (155 kDa nucleoporin) (Nucleoporin Nup155)	structural constituent of nuclear pore [GO:0017056]; transporter activity [GO:0005215]
[103]	Q59GN2	Putative 60S ribosomal protein L39-like 5 (60S ribosomal protein L39 pseudogene 5)	structural constituent of ribosome [GO:0003735]
[104]	Q9BQC6	Ribosomal protein 63, mitochondrial (hMRP63) (Mitochondrial ribosomal protein 63) (Mitochondrial ribosomal protein L57)	structural constituent of ribosome [GO:0003735]
[105]	P53621	Coatomer subunit alpha (Alpha-coat protein) (Alpha-COP) (HEP-COP) (HEPCOP) [Cleaved into: Xenin (Xenopsin-related peptide); Proxenin]	structural molecule activity [GO:0005198]
[106]	P35606	Coatomer subunit beta' (Beta'-coat protein) (Beta'-COP) (p102)	structural molecule activity [GO:0005198]
[107]	Q86SG2	Ankyrin repeat domain-containing protein 23 (Diabetes-related ankyrin repeat protein) (Muscle ankyrin repeat protein 3)	titin binding [GO:0031432]

[108]	Q04725	Transducin-like enhancer protein 2 (Enhancer of split groucho-like protein 2) (ESG2)	transcription corepressor activity [GO:0003714]
[109]	Q6EMK4	Vasorin (Protein slit-like 2)	transforming growth factor beta binding [GO:0050431]
[110]	O75312	Zinc finger protein ZPR1 (Zinc finger protein 259)	translation initiation factor binding [GO:0031369]; zinc ion binding [GO:0008270]
[111]	Q9HBX8	Leucine-rich repeat-containing G-protein coupled receptor 6	transmembrane signaling receptor activity [GO:0004888]
[112]	Q9BXR5	Toll-like receptor 10 (CD antigen CD290)	transmembrane signaling receptor activity [GO:0004888]
[113]	Q9H9V4	RING finger protein 122	zinc ion binding [GO:0008270]
[114]	Q8N7C7	RING finger protein 148	zinc ion binding [GO:0008270]
[115]	Q9ULK6	RING finger protein 150	zinc ion binding [GO:0008270]
[116]	Q6ZSG1	RING finger protein 165	zinc ion binding [GO:0008270]
[117]	Q9Y6U7	RING finger protein 215	zinc ion binding [GO:0008270]
[118]	A6NCQ9	RING finger protein 222	zinc ion binding [GO:0008270]
[119]	Q9Y225	RING finger protein 24	zinc ion binding [GO:0008270]
[120]	Q9H0A6	RING finger protein 32	zinc ion binding [GO:0008270]
[121]	Q7L0R7	RING finger protein 44	zinc ion binding [GO:0008270]
[122]	Q6PJ69	Tripartite motif-containing protein 65	zinc ion binding [GO:0008270]
[123]	Q8WWF5	Zinc/RING finger protein 4 (RING finger protein 204)	zinc ion binding [GO:0008270]

#### Unannotated proteins

Serial number	Entry	Protein name	GO annotation (molecular function)
[1]	P60896	26S proteasome complex subunit DSS1 (Deleted in split hand/split foot protein 1) (Split hand/foot deleted protein 1) (Split hand/foot malformation type 1 protein)	
[2]	Q8NHW5	60S acidic ribosomal protein P0-like	
[3]	Q86WK7	Amphoterin-induced protein 3 (AMIGO-3) (Alivin-3)	
[4]	Q9P0K7	Ankyrin repeat and coiled-coil structure-containing protein (Novel retinal pigment epithelial cell protein) (Retinoic acid-induced protein 14)	
[5]	Q495B1	Ankyrin repeat and death domain-containing protein 1A	
[6]	A6NHY2	Ankyrin repeat and death domain-containing protein 1B	
[7]	Q92625	Ankyrin repeat and SAM domain-containing protein 1A (Odin)	
[8]	Q6ZW76	Ankyrin repeat and SAM domain-containing protein 3	
[9]	Q68DC2	Ankyrin repeat and SAM domain-containing protein 6 (Ankyrin repeat domain-containing protein 14) (SamCystin) (Sterile alpha motif domain-containing protein 6) (SAM domain-containing protein 6)	
[10]	Q8WXI3	Ankyrin repeat and SOCS box protein 10 (ASB-10)	
[11]	Q8W XK3	Ankyrin repeat and SOCS box protein 13 (ASB-13)	
[12]	A6NK59	Ankyrin repeat and SOCS box protein 14 (ASB-14)	
[13]	Q8W XK1	Ankyrin repeat and SOCS box protein 15 (ASB-15)	
[14]	Q96NS5	Ankyrin repeat and SOCS box protein 16 (ASB-16)	
[15]	Q9Y575	Ankyrin repeat and SOCS box protein 3 (ASB-3)	
[16]	Q9NWX5	Ankyrin repeat and SOCS box protein 6 (ASB-6)	
[17]	Q9H672	Ankyrin repeat and SOCS box protein 7 (ASB-7)	
[18]	Q9H765	Ankyrin repeat and SOCS box protein 8 (ASB-8)	
[19]	Q6UB98	Ankyrin repeat domain-containing protein 12 (Ankyrin repeat-containing cofactor 2) (GAC-1 protein)	
[20]	Q6P6B7	Ankyrin repeat domain-containing protein 16	
[21]	Q5TYW2	Ankyrin repeat domain-containing protein 20A1	

[22]	Q5SQ80	Ankyrin repeat domain-containing protein 20A2
[23]	Q5VUR7	Ankyrin repeat domain-containing protein 20A3
[24]	Q4UJ75	Ankyrin repeat domain-containing protein 20A4
[25]	Q5CZ79	Ankyrin repeat domain-containing protein 20B (Ankyrin repeat domain-containing protein 20A pseudogene)
[26]	Q8TF21	Ankyrin repeat domain-containing protein 24
[27]	Q8N6D5	Ankyrin repeat domain-containing protein 29
[28]	Q9BXX2	Ankyrin repeat domain-containing protein 30B (Serologically defined breast cancer antigen NY-BR-1.1)
[29]	Q8N283	Ankyrin repeat domain-containing protein 35
[30]	Q8N9B4	Ankyrin repeat domain-containing protein 42
[31]	Q9ULJ7	Ankyrin repeat domain-containing protein 50
[32]	Q3KP44	Ankyrin repeat domain-containing protein 55
[33]	Q9Y2G4	Ankyrin repeat domain-containing protein 6 (Diversin)
[34]	A6NGH8	Ankyrin repeat domain-containing protein 61
[35]	A6NC57	Ankyrin repeat domain-containing protein 62
[36]	E5RJM6	Ankyrin repeat domain-containing protein 65
[37]	B4E2M5	Ankyrin repeat domain-containing protein 66
[38]	Q92527	Ankyrin repeat domain-containing protein 7 (Testis-specific protein TSA806)
[39]	Q9BVC5	Ashwin
[40]	Q9NWT8	Aurora kinase A-interacting protein (AURKA-interacting protein) (28S ribosomal protein S38, mitochondrial) (MRP-S38)
[41]	Q8NAA4	Autophagy-related protein 16-2 (APG16-like 2) (WD repeat-containing protein 80)
[42]	Q9NSI6	Bromodomain and WD repeat-containing protein 1 (WD repeat-containing protein 9)
[43]	Q6RI45	Bromodomain and WD repeat-containing protein 3
[44]	Q8WUE5	Cancer/testis antigen 55 (Tumor antigen BJ-HCC-20)
[45]	Q99467	CD180 antigen (Lymphocyte antigen 64) (Radioprotective 105 kDa protein) (CD antigen CD180)
[46]	Q86Y33	Cell division cycle protein 20 homolog B
[47]	O15335	Chondroadherin (Cartilage leucine-rich protein)
[48]	Q96MT7	Cilia- and flagella-associated protein 44 (WD repeat-containing protein 52)
[49]	Q8N1V2	Cilia- and flagella-associated protein 52 (WD repeat-containing protein 16) (WD40-repeat protein up-regulated in HCC)
[50]	Q96MR6	Cilia- and flagella-associated protein 57 (WD repeat-containing protein 65)
[51]	O95170	CMT1A duplicated region transcript 1 protein
[52]	Q8WUD4	Coiled-coil domain-containing protein 12
[53]	Q8WZ74	Cortactin-binding protein 2 (CortBP2)
[54]	Q5QP82	DDB1- and CUL4-associated factor 10 (WD repeat-containing protein 32)
[55]	Q8TEB1	DDB1- and CUL4-associated factor 11 (WD repeat-containing protein 23)
[56]	Q96JK2	DDB1- and CUL4-associated factor 5 (Breakpoint cluster region protein 2) (BCRP2) (WD repeat-containing protein 22)
[57]	A6NGE4	DDB1- and CUL4-associated factor 8-like protein 1 (WD repeat-containing protein 42B)
[58]	P0C7V8	DDB1- and CUL4-associated factor 8-like protein 2 (WD repeat-containing protein 42C)
[59]	Q14591	Deleted.
[60]	Q9NZJ0	Denticleless protein homolog (DDB1- and CUL4-associated factor 2) (Lethal(2) denticleless protein homolog) (Retinoic acid-regulated nuclear matrix-associated protein)
[61]	Q8N136	Dynein assembly factor with WDR repeat domains 1 (Outer row dynein assembly protein 16 homolog) (WD repeat-containing protein 69)
[62]	Q32P44	Echinoderm microtubule-associated protein-like 3 (EMAP-3)
[63]	Q9HC35	Echinoderm microtubule-associated protein-like 4 (EMAP-4) (Restrictedly overexpressed proliferation-associated protein) (Ropp 120)
[64]	Q6ZMW3	Echinoderm microtubule-associated protein-like 6 (EMAP-6) (Echinoderm microtubule-associated

		protein-like 5-like)
[65]	Q8NDI1	EH domain-binding protein 1
[66]	Q8N3D4	EH domain-binding protein 1-like protein 1
[67]	Q8TE02	Elongator complex protein 5 (Dermal papilla-derived protein 6) (S-phase 2 protein)
[68]	P0CF75	Endogenous Bornavirus-like nucleoprotein 1 (Endogenous Borna-like N element-1) (EBLN-1)
[69]	Q6P2I7	Endogenous Bornavirus-like nucleoprotein 2 (Endogenous Borna-like N element-2) (EBLN-2)
[70]	Q6ZVH7	Espin-like protein
[71]	Q5XX13	F-box/WD repeat-containing protein 10 (F-box and WD-40 domain-containing protein 10) (Ubiquitin ligase-specificity factor)
[72]	P57775	F-box/WD repeat-containing protein 4 (Dactylin) (F-box and WD-40 domain-containing protein 4)
[73]	Q8N3Y1	F-box/WD repeat-containing protein 8 (F-box and WD-40 domain-containing protein 8) (F-box only protein 29)
[74]	Q5XUX1	F-box/WD repeat-containing protein 9 (F-box and WD-40 domain-containing protein 9)
[75]	Q8TC84	Fibronectin type 3 and ankyrin repeat domains protein 1
[76]	Q9UM11	Fizzy-related protein homolog (Fzr) (CDC20-like protein 1) (Cdh1/Hct1 homolog) (hCDH1)
[77]	Q8TAE8	Growth arrest and DNA damage-inducible proteins-interacting protein 1 (39S ribosomal protein L59, mitochondrial) (MRP-L59) (CKII beta-associating protein) (CR6-interacting factor 1) (CRIF1) (Papillomavirus L2-interacting nuclear protein 1) (PLINP) (PLINP-1) (p53-responsive gene 6 protein)
[78]	Q9BYB4	Guanine nucleotide-binding protein subunit beta-like protein 1 (G protein subunit beta-like protein 1) (DGCRK3) (WD repeat-containing protein 14) (WD40 repeat-containing protein deleted in VCFS) (WDVCF)
[79]	P26927	Hepatocyte growth factor-like protein (Macrophage stimulatory protein) (Macrophage-stimulating protein) (MSP) [Cleaved into: Hepatocyte growth factor-like protein alpha chain; Hepatocyte growth factor-like protein beta chain]
[80]	O14498	Immunoglobulin superfamily containing leucine-rich repeat protein
[81]	Q6UXK2	Immunoglobulin superfamily containing leucine-rich repeat protein 2 (Leucine-rich repeat domain and immunoglobulin domain-containing axon extension protein)
[82]	Q6WRI0	Immunoglobulin superfamily member 10 (IgSF10) (Calvaria mechanical force protein 608) (CMF608)
[83]	Q6UXH9	Inactive serine protease PAMR1 (Peptidase domain-containing protein associated with muscle regeneration 1) (Regeneration-associated muscle protease homolog)
[84]	Q9HBG6	Intraflagellar transport protein 122 homolog (WD repeat-containing protein 10) (WD repeat-containing protein 140)
[85]	Q9P2H3	Intraflagellar transport protein 80 homolog (WD repeat-containing protein 56)
[86]	Q9Y283	Inversin (Inversion of embryo turning homolog) (Nephrocystin-2)
[87]	Q9H9V9	JmjC domain-containing protein 4 (Jumonji domain-containing protein 4)
[88]	Q5T7N3	KN motif and ankyrin repeat domain-containing protein 4 (Ankyrin repeat domain-containing protein 38)
[89]	P02750	Leucine-rich alpha-2-glycoprotein (LRG)
[90]	Q9P244	Leucine-rich repeat and fibronectin type III domain-containing protein 1 (Synaptic adhesion-like molecule 2)
[91]	Q9ULH4	Leucine-rich repeat and fibronectin type-III domain-containing protein 2 (Synaptic adhesion-like molecule 1)
[92]	Q9BTN0	Leucine-rich repeat and fibronectin type-III domain-containing protein 3 (Synaptic adhesion-like molecule 4)
[93]	Q96NI6	Leucine-rich repeat and fibronectin type-III domain-containing protein 5
[94]	Q7L985	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 2 (Leucine-rich repeat neuronal protein 3) (Leucine-rich repeat neuronal protein 6C)
[95]	P0C6S8	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 3 (Leucine-rich repeat neuronal protein 2) (Leucine-rich repeat neuronal protein 6B)
[96]	Q6UY18	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 4 (Leucine-rich repeat neuronal protein 6D)
[97]	Q9HBL6	Leucine-rich repeat and transmembrane domain-containing protein 1
[98]	Q8N967	Leucine-rich repeat and transmembrane domain-containing protein 2
[99]	Q6UXK5	Leucine-rich repeat neuronal protein 1 (Neuronal leucine-rich repeat protein 1) (NLRR-1)
[100]	Q9H3W5	Leucine-rich repeat neuronal protein 3 (Neuronal leucine-rich repeat protein 3) (NLRR-3)

[101]	Q86UE6	Leucine-rich repeat transmembrane neuronal protein 1
[102]	O43300	Leucine-rich repeat transmembrane neuronal protein 2 (Leucine-rich repeat neuronal 2 protein)
[103]	Q86VH5	Leucine-rich repeat transmembrane neuronal protein 3
[104]	Q86VH4	Leucine-rich repeat transmembrane neuronal protein 4
[105]	Q8N6Y2	Leucine-rich repeat-containing protein 17 (p37NB)
[106]	Q50LG9	Leucine-rich repeat-containing protein 24
[107]	Q14392	Leucine-rich repeat-containing protein 32 (Garpin) (Glycoprotein A repetitions predominant) (GARP)
[108]	Q5VT99	Leucine-rich repeat-containing protein 38 (BK channel auxiliary gamma subunit LRRC38)
[109]	Q8N9N7	Leucine-rich repeat-containing protein 57
[110]	Q6ZNP3	Leucine-rich repeat-containing protein 69
[111]	Q7Z2Q7	Leucine-rich repeat-containing protein 70 (Synleucin)
[112]	Q96JA1	Leucine-rich repeats and immunoglobulin-like domains protein 1 (LIG-1)
[113]	O94898	Leucine-rich repeats and immunoglobulin-like domains protein 2 (LIG-2)
[114]	Q8N4S9	MARVEL domain-containing protein 2 (Tricellulin)
[115]	O43684	Mitotic checkpoint protein BUB3
[116]	Q9ULI1	NACHT and WD repeat domain-containing protein 2 (Leucine-rich repeat and WD repeat-containing protein KIAA1239)
[117]	Q86YC3	Negative regulator of reactive oxygen species (Leucine-rich repeat-containing protein 33)
[118]	Q9NVX2	Notchless protein homolog 1
[119]	Q8NFH5	Nucleoporin NUP53 (35 kDa nucleoporin) (Mitotic phosphoprotein 44) (MP-44) (Nuclear pore complex protein Nup53) (Nucleoporin Nup35)
[120]	Q9GZU5	Nyctalopin
[121]	Q9H607	Occludin/ELL domain-containing protein 1
[122]	P23515	Oligodendrocyte-myelin glycoprotein
[123]	Q99983	Osteomodulin (Keratan sulfate proteoglycan osteomodulin) (KSPG osteomodulin) (Osteoadherin) (OSAD)
[124]	Q9NWT1	p21-activated protein kinase-interacting protein 1 (PAK/PLC-interacting protein 1) (hPIP1) (PAK1-interacting protein 1) (WD repeat-containing protein 84)
[125]	Q13610	Periodic tryptophan protein 1 homolog (Keratinocyte protein IEF SSP 9502)
[126]	P40197	Platelet glycoprotein V (GPV) (Glycoprotein 5) (CD antigen CD42d)
[127]	Q8NBT0	POC1 centriolar protein homolog A (Pix2) (Proteome of centriole protein 1A) (WD repeat-containing protein 51A)
[128]	Q8TC44	POC1 centriolar protein homolog B (Pix1) (Proteome of centriole protein 1B) (WD repeat-containing protein 51B)
[129]	P0CG47	Polyubiquitin-B [Cleaved into: Ubiquitin]
[130]	Q6S8J7	POTE ankyrin domain family member A (ANKRD26-like family A member 1) (Prostate, ovary, testis-expressed protein on chromosome 8) (POTE-8)
[131]	Q6S5H4	POTE ankyrin domain family member B (ANKRD26-like family B member 1) (Prostate, ovary, testis-expressed protein on chromosome 15) (POTE-15)
[132]	H3BUK9	POTE ankyrin domain family member B2
[133]	B2RU33	POTE ankyrin domain family member C (ANKRD26-like family B member 2) (Prostate, ovary, testis-expressed protein on chromosome 18) (POTE-18)
[134]	Q86YR6	POTE ankyrin domain family member D (ANKRD26-like family B member 3) (Ankyrin repeat domain-containing protein 21) (Prostate, ovary, testis-expressed protein) (Protein POTE)
[135]	Q6S8J3	POTE ankyrin domain family member E (ANKRD26-like family C member 1A) (Prostate, ovary, testis-expressed protein on chromosome 2) (POTE-2)
[136]	A5A3E0	POTE ankyrin domain family member F (ANKRD26-like family C member 1B) (Chimeric POTE-actin protein)
[137]	Q6S5H5	POTE ankyrin domain family member G (ANKRD26-like family C member 2) (Prostate, ovary, testis-expressed protein on chromosome 14) (POTE-14)
[138]	Q6S545	POTE ankyrin domain family member H (ANKRD26-like family C member 3) (Prostate, ovary, testis-expressed protein on chromosome 22) (POTE-22)
[139]	P0CG38	POTE ankyrin domain family member I

[140]	P0CG39	POTE ankyrin domain family member J
[141]	O76071	Probable cytosolic iron-sulfur protein assembly protein CIAO1 (WD repeat-containing protein 39)
[142]	Q9BRP4	Proteasomal ATPase-associated factor 1 (Protein G-16) (WD repeat-containing protein 71)
[143]	Q5T9C2	Protein FAM102A (Early estrogen-induced gene 1 protein)
[144]	Q5T8I3	Protein FAM102B
[145]	Q8WUF8	Protein FAM172A
[146]	Q9NSI2	Protein FAM207A
[147]	Q96JP0	Protein fem-1 homolog C (FEM1c) (FEM1-gamma)
[148]	Q14667	Protein KIAA0100 (Antigen MLAA-22) (Breast cancer-overexpressed gene 1 protein)
[149]	Q8NHV4	Protein NEDD1 (Neural precursor cell expressed developmentally down-regulated protein 1) (NEDD-1)
[150]	Q9H7Z3	Protein NRDE2 homolog
[151]	Q9BZL4	Protein phosphatase 1 regulatory subunit 12C (Protein phosphatase 1 myosin-binding subunit of 85 kDa) (Protein phosphatase 1 myosin-binding subunit p85)
[152]	Q14160	Protein scribble homolog (Scribble) (hScrib) (Protein LAP4)
[153]	P55735	Protein SEC13 homolog (SEC13-like protein 1) (SEC13-related protein)
[154]	Q9C0D5	Protein TANC1 (Tetratricopeptide repeat, ankyrin repeat and coiled-coil domain-containing protein 1)
[155]	Q53HC9	Protein TSSC1 (Tumor-suppressing STF cDNA 1 protein) (Tumor-suppressing subchromosomal transferable fragment candidate gene 1 protein)
[156]	Q9NQ39	Putative 40S ribosomal protein S10-like
[157]	Q9H560	Putative ankyrin repeat domain-containing protein 19 (Ankyrin repeat domain-containing protein 19 pseudogene)
[158]	A7E2S9	Putative ankyrin repeat domain-containing protein 30B-like
[159]	Q8N7Z5	Putative ankyrin repeat domain-containing protein 31
[160]	P0C7Q3	Putative cyclin-related protein FAM58B
[161]	A6NI47	Putative POTE ankyrin domain family member M
[162]	A6NC97	Putative protein FAM172B (FAM172B pseudogene)
[163]	Q9NSQ0	Putative ribosomal RNA-processing protein 7 homolog B (Putative gastric cancer antigen Zg14-like protein)
[164]	O00472	RNA polymerase II elongation factor ELL2
[165]	Q9H6T3	RNA polymerase II-associated protein 3
[166]	Q8WVC0	RNA polymerase-associated protein LEO1 (Replicative senescence down-regulated leo1-like protein)
[167]	A6NKF1	SAC3 domain-containing protein 1 (SAC3 homology domain-containing protein 1)
[168]	O15084	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A (PP6-ARS-A) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-A) (Ankyrin repeat domain-containing protein 28) (Phosphatase interactor targeting protein hnRNP K) (PITK)
[169]	Q8N8A2	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit B (PP6-ARS-B) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-B) (Ankyrin repeat domain-containing protein 44)
[170]	Q8NB46	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit C (PP6-ARS-C) (Serine/threonine-protein phosphatase 6 regulatory subunit ARS-C) (Ankyrin repeat domain-containing protein 52)
[171]	Q9P1W8	Signal-regulatory protein gamma (SIRP-gamma) (CD172 antigen-like family member B) (Signal-regulatory protein beta-2) (SIRP-b2) (SIRP-beta-2) (CD antigen CD172g)
[172]	O94933	SLIT and NTRK-like protein 3
[173]	O94991	SLIT and NTRK-like protein 5 (Leucine-rich repeat-containing protein 11)
[174]	Q8N0X2	Sperm-associated antigen 16 protein (Pf20 protein homolog)
[175]	Q9BVC4	Target of rapamycin complex subunit LST8 (TORC subunit LST8) (G protein beta subunit-like) (Gable) (Protein GbetaL) (Mammalian lethal with SEC13 protein 8) (mLST8)
[176]	Q5UIP0	Telomere-associated protein RIF1 (Rap1-interacting factor 1 homolog)
[177]	Q04726	Transducin-like enhancer protein 3 (Enhancer of split groucho-like protein 3) (ESG3)
[178]	Q9H808	Transducin-like enhancer protein 6
[179]	Q13641	Trophoblast glycoprotein (5T4 oncofetal antigen) (5T4 oncofetal trophoblast glycoprotein) (5T4

		oncotrophoblast glycoprotein) (M6P1) (Wnt-activated inhibitory factor 1) (WAIF1)
[180]	Q8WUA8	Tsukushin (Tsukushi) (E2-induced gene 4 protein) (Leucine-rich repeat-containing protein 54)
[181]	P78324	Tyrosine-protein phosphatase non-receptor type substrate 1 (SHP substrate 1) (SHPS-1) (Brain Ig-like molecule with tyrosine-based activation motifs) (Bit) (CD172 antigen-like family member A) (Inhibitory receptor SHPS-1) (Macrophage fusion receptor) (MyD-1 antigen) (Signal-regulatory protein alpha-1) (Sirp-alpha-1) (Signal-regulatory protein alpha-2) (Sirp-alpha-2) (Signal-regulatory protein alpha-3) (Sirp-alpha-3) (p84) (CD antigen CD172a)
[182]	Q9BZF9	Uveal autoantigen with coiled-coil domains and ankyrin repeats
[183]	Q6RSH7	Von Hippel-Lindau-like protein (VHL-like protein) (VLP)
[184]	Q9NYS7	WD repeat and SOCS box-containing protein 2 (WSB-2) (CS box-containing WD protein)
[185]	O75083	WD repeat-containing protein 1 (Actin-interacting protein 1) (AIP1) (NORI-1)
[186]	Q9H1Z4	WD repeat-containing protein 13
[187]	Q8IZU2	WD repeat-containing protein 17
[188]	Q9BV38	WD repeat-containing protein 18
[189]	Q64LD2	WD repeat-containing protein 25
[190]	Q9H7D7	WD repeat-containing protein 26 (CUL4- and DDB1-associated WDR protein 2) (Myocardial ischemic preconditioning up-regulated protein 2)
[191]	A2RRH5	WD repeat-containing protein 27
[192]	Q8NA23	WD repeat-containing protein 31
[193]	Q9Y2I8	WD repeat-containing protein 37
[194]	Q5JTN6	WD repeat-containing protein 38
[195]	O94967	WD repeat-containing protein 47 (Neuronal enriched MAP-interacting protein) (Nemitin)
[196]	Q8TAF3	WD repeat-containing protein 48 (USP1-associated factor 1) (WD repeat endosomal protein) (p80)
[197]	Q8IV35	WD repeat-containing protein 49
[198]	Q7Z5U6	WD repeat-containing protein 53
[199]	Q9H6Y2	WD repeat-containing protein 55
[200]	Q6PJI9	WD repeat-containing protein 59
[201]	O43379	WD repeat-containing protein 62
[202]	B1ANS9	WD repeat-containing protein 64
[203]	Q9Y4E6	WD repeat-containing protein 7 (Rabconnectin-3 beta) (TGF-beta resistance-associated protein TRAG)
[204]	Q3MJ13	WD repeat-containing protein 72
[205]	Q86TI4	WD repeat-containing protein 86
[206]	Q6ZMY6	WD repeat-containing protein 88 (PQQ repeat and WD repeat-containing protein)
[207]	Q96KV7	WD repeat-containing protein 90
[208]	A4D1P6	WD repeat-containing protein 91
[209]	A6NE52	WD repeat-containing protein KIAA1875
[210]	Q2TAY7	WD40 repeat-containing protein SMU1 (Smu-1 suppressor of mec-8 and unc-52 protein homolog) [Cleaved into: WD40 repeat-containing protein SMU1, N-terminally processed]
[211]	A6XGL0	YjeF N-terminal domain-containing protein 3 (YjeF_N3) (hYjeF_N3)