

Row,Col	ID	Sequence	Tyr	SpotC	UniprotAccession	Description
1,1	EFS_246_258	GGTDEGIYDVPLL	[253]	500	O43281	Embryonal Fyn-associated substrate (HEFS).
1,2	41_654_666	LDGENIYIRHSNL	[660]	1000	P11171	Protein 4.1 (Band 4.1) (P4.1) (EPB4.1) (4.1R).
1,3	ACHD_383_395	YISKAEEYFLLKS	[383, 390]	1000	Q07001	Acetylcholine receptor subunit delta precursor.
1,4	AMPE_5_17	EREGSKRYCIQTK	[12]	1000	Q07075	Glutamyl aminopeptidase (EC 3.4.11.7) (EAP) (Aminopeptidase A) (APA)(Differentiation antigen gp160) (CD249 antigen).
1,5	ANXA2_17_29	HSTPPSAYGSVKA	[24]	1000	P07355	Annexin A2 (Annexin-2) (Annexin II) (Lipocortin II) (Calpactin I heavychain) (Chromobindin-8) (p36) (Protein I) (Placental anticoagulantprotein IV) (PAP-IV).
1,6	ART_004_EAIYAAPFAKKKXC	EAIYAAPFAKKK	NA	1000	NA	NA
1,7	B3AT_39_51	TEATATDYHTTSH	[46]	1000	P02730	Band 3 anion transport protein (Anion exchange protein 1) (AE 1)(Solute carrier family 4 member 1) (CD233 antigen).
1,8	C1R_199_211	TEASGYISSLEYP	[204, 210]	1000	P00736	Complement C1r subcomponent precursor (EC 3.4.21.41) (Complementcomponent 1, r subcomponent) [Contains: Complement C1r subcomponentheavy chain; Complement C1r subcomponent light chain].
1,9	CALM_93_105	FDKDGNGYISAAE	[100]	1000	P0DP23	Calmodulin (CaM).
1,10	CALM_95_107	KDGNGYISAAELR	[100]	1000	P0DP23	Calmodulin (CaM).
1,11	CBL_693_705	EGEEDTEYMT PSS	[700]	1000	P22681	E3 ubiquitin-protein ligase CBL (EC 6.3.2.-) (Signal transductionprotein CBL) (Proto-oncogene c-CBL) (Casitas B-lineage lymphoma proto-oncogene) (RING finger protein 55).
1,12	CD3Z_116_128	KDKMAEAYSEIGM	[123]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
1,13	CD3Z_146_158	STATKDTYDALHM	[153]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
1,14	ART_003_EAI(pY)AAPFAKKKXC	EAI(pY)AAPFAKKK	NA	30	NA	NA
2,1	CDK2_8_20	EKIGEGTYGVVYK	[15, 19]	1000	P24941	Cyclin-dependent kinase 2 (EC:2.7.11.22) Cell division protein kinase 2 (EC 2.7.11.22) (p33 protein kinase).
2,2	CDK7_157_169	GLAKSFGSPNRAY	[169]	1000	P50613	Cyclin-dependent kinase 7 (EC:2.7.11.22, EC:2.7.11.23) Cell division protein kinase 7 (EC 2.7.11.22) (EC 2.7.11.23) (CDK-activating kinase) (TFIIH basal transcription factor complexkinase subunit) (39 kDa protein kinase) (P39 Mo15)
2,3	CRK_214_226	GPPEPGPYAQPSV	[221]	1000	P46108	Proto-oncogene C-crk (p38) (Adapter molecule crk).
2,4	CTNB1_79_91	VADIDGQYAMTRA	[86]	1000	P35222	Catenin beta-1 (Beta-catenin).
2,5	DCX_67_79	GIVYAVSSDRFRS	[70]	1000	O43602	Neuronal migration protein doublecortin (Lissencephalin-X) (Lis-X)(Dublin).
2,6	DDR1_506_518	LLLSNPAYRLLLA	[513]	1000	Q08345	Epithelial discoidin domain-containing receptor 1 precursor(EC 2.7.10.1) (Epithelial discoidin domain receptor 1) (Tyrosinekinase DDR) (Discoidin receptor tyrosine kinase) (Tyrosine-proteinkinase CAK) (Cell adhesion kinase) (TRK E) (Protein-tyrosine kinaseRTK 6) (HGK2) (CD167a antigen).
2,7	DYR1A_212_224	KHDTMKYIVVHL	[219, 220]	1000	Q13627	Dual specificity tyrosine-phosphorylation-regulated kinase 1A(EC 2.7.12.1) (Protein kinase minibrain homolog) (MNBH) (HP86) (Dualspecificity YAK1-related kinase) (hMNB).

2,8	DYR1A_312_324	CQLGQRIYQYIQS	[319, 321]	1000	Q13627	Dual specificity tyrosine-phosphorylation-regulated kinase 1A(EC 2.7.12.1) (Protein kinase minibrain homolog) (MNBH) (HP86) (Dualspecificity YAK1-related kinase) (hMNB).
2,9	EGFR_1062_1074	EDSFLQRYSSDPT	[1069]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
2,10	EGFR_1103_1115	GSVQNPVYHNQPL	[1110]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
2,11	EGFR_1118_1130	APSRDPHYQDPHS	[1125]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
2,12	EGFR_1190_1202	STAENAEYLRVAP	[1197]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
2,13	EGFR_862_874	LGAEKEYHAEGG	[869]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
2,14	EGFR_908_920	MTFGSKPYDGIPA	[915]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptortyrosine-protein kinase ErbB-1).
3,1	EPHA1_774_786	LDDFDGTETQGG	[781]	1000	P21709	Ephrin type-A receptor 1 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor EPH).
3,2	EPHA2_581_593	QLKPLKTYVDPHT	[588]	1000	P29317	Ephrin type-A receptor 2 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor ECK) (Epithelial cell kinase).
3,3	EPHA2_765_777	EDDPEATYTTSGG	[772]	1000	P29317	Ephrin type-A receptor 2 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor ECK) (Epithelial cell kinase).
3,4	EPHA4_589_601	LNQGVRTYVDPFT	[596]	1000	P54764	Ephrin type-A receptor 4 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor SEK) (Receptor protein-tyrosine kinase HEK8)(Tyrosine-protein kinase TYRO1).
3,5	EPHA4_921_933	QAIKMDRYKDNFT	[928]	1000	P54764	Ephrin type-A receptor 4 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor SEK) (Receptor protein-tyrosine kinase HEK8)(Tyrosine-protein kinase TYRO1).
3,6	EPHA7_607_619	TYIDPETYEDPNR	[608, 614]	1000	Q15375	Ephrin type-A receptor 7 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor EHK-3) (EPH homology kinase 3) (Receptor protein-tyrosine kinase HEK11).
3,7	EPHB1_771_783	DDTSDPTYTSSLG	[778]	1000	P54762	Ephrin type-B receptor 1 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor EPH-2) (NET) (HEK6) (ELK).
3,8	EPHB1_921_933	SAIKMVQYRDSFL	[928]	1000	P54762	Ephrin type-B receptor 1 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor EPH-2) (NET) (HEK6) (ELK).
3,9	EPHB4_583_595	IGHGTKVYIDPFT	[590]	1000	P54760	Ephrin type-B receptor 4 precursor (EC 2.7.10.1) (Tyrosine-proteinkinase receptor HTK) (Tyrosine-protein kinase TYRO11).
3,10	EPOR_361_373	SEHAQDTYLVLDK	[368]	1000	P19235	Erythropoietin receptor precursor (EPO-R).
3,11	ERBB2_870_882	LDIDETEHADGG	[877]	1000	P04626	Receptor tyrosine-protein kinase erbB-2 precursor (EC 2.7.10.1)(p185erbB2) (C-erbB-2) (NEU proto-oncogene) (Tyrosine kinase-type cell surface receptor HER2) (MLN 19) (CD340 antigen).
3,12	ERBB4_1181_1193	QALDNPEYHNASN	[1188]	1000	Q15303	Receptor tyrosine-protein kinase erbB-4 precursor (EC 2.7.10.1)(p180erbB4) (Tyrosine kinase-type cell surface receptor HER4).
3,13	EFS_246_258_Y253F	GGTDEGIFDVPLL	[]	500	O43281	Embryonal Fyn-associated substrate (HEFS).

3,14	FABPH_13_25	DSKNFDDYMKSLG	[20]	1000	P05413	Fatty acid-binding protein, heart (H-FABP) (Heart-type fatty acid-binding protein) (Muscle fatty acid-binding protein) (M-FABP)(Mammary-derived growth inhibitor) (MDGI).
4,1	FAK1_569_581	RYMEDSTYYKASK	[570, 576, 577]	1000	Q05397	Focal adhesion kinase 1 (EC 2.7.10.2) (FADK 1) (pp125FAK) (Protein-tyrosine kinase 2).
4,2	FAK2_572_584	RYIEDEDYYKASV	[573, 579, 580]	1000	Q14289	Protein tyrosine kinase 2 beta (EC 2.7.10.2) (Focal adhesion kinase 2)(FADK 2) (Proline-rich tyrosine kinase 2) (Cell adhesion kinase beta)(CAK beta) (Calcium-dependent tyrosine kinase) (CADTK) (Relatedadhesion focal tyrosine kinase) (RAFTK).
4,3	FER_707_719	RQEDGGVYSSSGL	[714]	1000	P16591	Proto-oncogene tyrosine-protein kinase FER (EC 2.7.10.2) (p94-FER) (c-FER) (Tyrosine kinase 3).
4,4	FES_706_718	REEADGVYAASGG	[713]	1000	P07332	Proto-oncogene tyrosine-protein kinase Fes/Fps (EC 2.7.10.2) (C-Fes).
4,5	FGFR3_641_653	DVHNLDYYKTTN	[647, 648]	1000	P22607	Fibroblast growth factor receptor 3 precursor (EC 2.7.10.1) (FGFR-3)(CD333 antigen).
4,6	FRK_380_392	KVDNEDIYESRHE	[387]	1000	P42685	Tyrosine-protein kinase FRK (EC 2.7.10.2) (FYN-related kinase)(Nuclear tyrosine protein kinase RAK).
4,7	INSR_1348_1360	SLGFKRSYEEHIP	[1355]	1000	P06213	Insulin receptor precursor (EC 2.7.10.1) (IR) (CD220 antigen)[Contains: Insulin receptor subunit alpha; Insulin receptor subunitbeta].
4,8	INSR_992_1004	YASSNPEYLSASD	[992, 999]	1000	P06213	Insulin receptor precursor (EC 2.7.10.1) (IR) (CD220 antigen)[Contains: Insulin receptor subunit alpha; Insulin receptor subunitbeta].
4,9	JAK1_1027_1039	AIETDKEYYTVKD	[1034,1035]	1000	P23458	Tyrosine-protein kinase JAK1 (EC 2.7.10.2) (Janus kinase 1) (JAK-1).
4,10	JAK2_563_577	VRREVG DYGQLHETE	[570]	1000	O60674	Tyrosine-protein kinase JAK2 (EC 2.7.10.2) (Janus kinase 2) (JAK-2).
4,11	K2C6B_53_65	GAGFGSRSYGLG	[62]	1000	P04259	Keratin, type II cytoskeletal 6B (Cytokeratin-6B) (CK 6B) (K6bkeratin).
4,12	K2C8_425_437	SAYGGTSPGLSY	[427, 437]	1000	P05787	Keratin, type II cytoskeletal 8 (Cytokeratin-8) (CK-8) (Keratin-8)(K8).
4,13	LAT_194_206	MESIDDYVNVPE	[200]	1000	O43561	Linker for activation of T-cells family member 1 (36 kDa phospho-tyrosine adapter protein) (pp36) (p36-38).
4,14	LAT_249_261	EEGAPDYENLQEL	[255]	1000	O43561	Linker for activation of T-cells family member 1 (36 kDa phospho-tyrosine adapter protein) (pp36) (p36-38).
5,1	LCK_387_399	RLIEDNEYTAREG	[394]	1000	P06239	Proto-oncogene tyrosine-protein kinase LCK (EC 2.7.10.2) (p56-LCK)(Lymphocyte cell-specific protein-tyrosine kinase) (LSK) (T cell-specific protein-tyrosine kinase).
5,2	MBP_198_210	ARTAHYGSLPQKS	[203]	1000	P02686	Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membraneencephalitogenic protein).
5,3	MBP_259_271	FGYGGRASDYKSA	[261, 268]	1000	P02686	Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membraneencephalitogenic protein).
5,4	MBP_263_275	GRASDYKSAHKGF	[268]	1000	P02686	Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membraneencephalitogenic protein).
5,5	MET_1227_1239	RDMYDKEYYSVHN	[1230, 1234, 1235]	1000	P08581	Hepatocyte growth factor receptor precursor (EC 2.7.10.1) (HGFreceptor) (Scatter factor receptor) (SF receptor) (HGF/SF receptor)(Met proto-oncogene tyrosine kinase) (c-Met).

5,6	MK01_180_192	HTGFLTEYVATRW	[187]	1000	P28482	Mitogen-activated protein kinase 1 (EC 2.7.11.24) (Extracellular signal-regulated kinase 2) (ERK-2) (Mitogen-activated protein kinase 2) (MAP kinase 2) (MAPK 2) (p42-MAPK) (ERT1).
5,7	MK01_198_210	IMLNSKGYTKSID	[205]	1000	P28482	Mitogen-activated protein kinase 1 (EC 2.7.11.24) (Extracellular signal-regulated kinase 2) (ERK-2) (Mitogen-activated protein kinase 2) (MAP kinase 2) (MAPK 2) (p42-MAPK) (ERT1).
5,8	MK07_212_224	AEHQYFMTEYVAT	[216,221]	1000	Q13164	Mitogen-activated protein kinase 7 (EC 2.7.11.24) (Extracellular signal-regulated kinase 5) (ERK-5) (ERK4) (BMK1 kinase).
5,9	MK10_216_228	TSFMMTPYVVTRY	[223, 228]	1000	P53779	Mitogen-activated protein kinase 10 (EC 2.7.11.24) (Stress-activated protein kinase JNK3) (c-Jun N-terminal kinase 3) (MAP kinase p49 3F12).
5,10	NCF1_313_325	QRSRKRLSQDAYR	[324]	1000	P14598	Neutrophil cytosol factor 1 (NCF-1) (Neutrophil NADPH oxidase factor1) (47 kDa neutrophil oxidase factor) (p47-phox) (NCF-47K) (47 kDa autosomal chronic granulomatous disease protein) (Nox organizer 2) (Nox-organizing protein 2) (SH3 and PX domain-containing protein 1A).
5,11	NPT2A_501_513	AKALGKRTAKYRW	[511]	1000	Q06495	Sodium-dependent phosphate transport protein 2A (Sodium/phosphate cotransporter 2A) (Na(+)/Pi cotransporter 2A) (Sodium-phosphate transport protein 2A) (Na(+)-dependent phosphate cotransporter 2A) (NaPi-2a) (Solute carrier family 34 member 1) (NaPi-3).
5,12	NTRK1_489_501	HIIENPQYFSDAC	[496]	1000	P04629	High affinity nerve growth factor receptor precursor (EC 2.7.10.1) (Neurotrophic tyrosine kinase receptor type 1) (TRK1-transforming tyrosine kinase protein) (p140-TrkA) (Trk-A).
5,13	NTRK2_509_521	PVIENPQYFGITN	[516]	1000	Q16620	BDNF/NT-3 growth factors receptor precursor (EC 2.7.10.1) (Neurotrophic tyrosine kinase receptor type 2) (TrkB tyrosine kinase) (GP145-TrkB) (Trk-B).
5,14	NTRK2_696_708	GMSRDVYSTDYR	[702, 706, 707]	1000	Q16620	BDNF/NT-3 growth factors receptor precursor (EC 2.7.10.1) (Neurotrophic tyrosine kinase receptor type 2) (TrkB tyrosine kinase) (GP145-TrkB) (Trk-B).
6,1	ODPAT_291_303	SMSDPGVSYRTRE	[299]	1000	P29803	Pyruvate dehydrogenase E1 component subunit alpha, testis-specific form, mitochondrial precursor (EC 1.2.4.1) (PDHE1-A type II).
6,2	PAXI_111_123	VGEEEHVYSFPNK	[118]	1000	P49023	Paxillin.
6,3	PAXI_24_36	FLSEETPYSYPTG	[31, 33]	1000	P49023	Paxillin.
6,4	PDPK1_2_14	ARTTSQLYDAVPI	[9]	1000	O15530	3-phosphoinositide-dependent protein kinase 1 (EC 2.7.11.1) (hPK1).
6,5	PECA1_706_718	KKDTETVYSEVRK	[713]	1000	P16284	Platelet endothelial cell adhesion molecule precursor (PECAM-1) (EndoCAM) (GPIIA') (CD31 antigen).
6,6	PERI_458_470	QRSELDKSSAHSY	[470]	1000	P41219	Peripherin.
6,7	PGFRB_1002_1014	LDTSSVLYTAVQP	[1009]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor (EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).
6,8	PGFRB_709_721	RPPSAELYSNALP	[716]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor (EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).
6,9	PGFRB_768_780	SSNYMAPYDNYVP	[771, 775, 778]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor (EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).

6,10	PGFRB_771_783	YMAPYDNYVPSAP	[771, 775, 778]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor(EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).
6,11	PLCG1_1246_1258	EGSFESRYQQPFE	[1253]	1000	P19174	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1(EC 3.1.4.11) (Phosphoinositide phospholipase C) (PLC-gamma-1)(Phospholipase C-gamma-1) (PLC-II) (PLC-148).
6,12	PLCG1_764_776	IGTAEPDYGALYE	[771, 775]	1000	P19174	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1(EC 3.1.4.11) (Phosphoinositide phospholipase C) (PLC-gamma-1)(Phospholipase C-gamma-1) (PLC-II) (PLC-148).
6,13	PRGR_545_557	LRPDSEASQSPQY	[557]	1000	P06401	Progesterone receptor (PR) (Nuclear receptor subfamily 3 group Cmember 3).
6,14	PRGR_786_798	EQRMKESFYSLC	[795]	1000	P06401	Progesterone receptor (PR) (Nuclear receptor subfamily 3 group Cmember 3).
7,1	PP2AB_297_309	EPHVTRRTPDYFL	[307]	1000	P62714	Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform(EC 3.1.3.16) (PP2A-beta).
7,2	PRRX2_202_214	WTASSPYSTVPPY	[208, 214]	1000	Q99811	Paired mesoderm homeobox protein 2 (PRX-2) (Paired-related homeoboxprotein 2).
7,3	PTN11_539_551	SKRKGHEYTNIKY	[546, 551]	1000	Q06124	Tyrosine-protein phosphatase non-receptor type 11 (EC 3.1.3.48)(Protein-tyrosine phosphatase 2C) (PTP-2C) (PTP-1D) (SH-PTP3) (SH-PTP2) (SHP-2) (Shp2).
7,4	RB_804_816	IYISPLKSPYKIS	[805, 813]	1000	P06400	Retinoblastoma-associated protein (PP110) (P105-RB) (RB).
7,5	RBL2_99_111	VPTVSKGTVEGNY	[111]	1000	Q08999	Retinoblastoma-like protein 2 (130 kDa retinoblastoma-associatedprotein) (p130) (PRB2) (RBR-2).
7,6	RET_1022_1034	TPSDSLIYDDGLS	[1029]	1000	P07949	Proto-oncogene tyrosine-protein kinase receptor ret precursor(EC 2.7.10.1) (C-ret).
7,7	RET_680_692	AQAFPVSYSSSGA	[687]	1000	P07949	Macrophage-stimulating protein receptor precursor (EC 2.7.10.1) (MSPreceptor) (p185-Ron) (CD136 antigen) (CDw136) [Contains: Macrophage-stimulating protein receptor alpha chain; Macrophage-stimulatingprotein receptor beta chain].
7,8	RON_1346_1358	SALLGDHYVQLPA	[1353]	1000	Q04912	Signal transducer and activator of transcription 5A.
7,9	STAT1_694_706	DGPKGTGYIKTEL	[701]	1000	P42224	Signal transducer and activator of transcription 1-alpha/beta(Transcription factor ISGF-3 components p91/p84).
7,10	STAT3_698_710	DPGSAAPYLKTKF	[705]	1000	P40763	Signal transducer and activator of transcription 3 (Acute-phaseresponse factor).
7,11	STAT4_686_698	TERGDKGYVPSVF	[693]	1000	Q14765	Proto-oncogene tyrosine-protein kinase receptor ret precursor(EC 2.7.10.1) (C-ret).
7,12	STAT4_714_726	PSDLLPMSPSVYA	[725]	1000	Q14765	Signal transducer and activator of transcription 4.
7,13	STA5A_687_699	LAKAVDGYVKPQI	[694]	1000	P42229	Signal transducer and activator of transcription 4.
7,14	STAT6_634_646	MGKDGRGYVPATI	[641]	1000	P42226	Signal transducer and activator of transcription 6 (IL-4 Stat).
8,1	RAF1_332_344	PRGQRDSSYYWEI	[340, 341]	1000	P04049	RAF proto-oncogene serine/threonine-protein kinase (EC 2.7.11.1) (Raf-1) (C-RAF) (cRaf).
8,2	RASA1_453_465	TVDGKEIYNTIRR	[460]	1000	P20936	Ras GTPase-activating protein 1 (GTPase-activating protein) (GAP) (Rasp21 protein activator) (p120GAP) (RasGAP).
8,3	TNNT1_2_14	SDTEEQEYEEEQP	[9]	1000	P13805	Troponin T, slow skeletal muscle (TnTs) (Slow skeletal muscle troponinT) (sTnT).

8,4	TYRO3_679_691	KIYSGDYRQGCA	[681, 685, 686]	1000	Q06418	Tyrosine-protein kinase receptor TYRO3 precursor (EC 2.7.10.1)(Tyrosine-protein kinase RSE) (Tyrosine-protein kinase SKY) (Tyrosine-protein kinase DTK) (Protein-tyrosine kinase byk).
8,5	VGFR1_1040_1052	DFGLARDIYKNPD	[1048]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-proteinkinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-liketyrosine kinase 1).
8,6	VGFR1_1046_1058_Y1048F	DIFKNPDYVRKGD	[1053]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-proteinkinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-liketyrosine kinase 1).
8,7	VGFR1_1049_1061	KNPDYVRKGDTL	[1053]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-proteinkinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-liketyrosine kinase 1).
8,8	VGFR1_1162_1174	VQQDGKDYIPINA	[1169]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-proteinkinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-liketyrosine kinase 1).
8,9	VGFR1_1206_1218	GSSDDVRYVNAFK	[1213]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-proteinkinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-liketyrosine kinase 1).
8,10	VGFR2_1046_1058	DFGLARDIYKDPD	[1054]	1000	P35968	Vascular endothelial growth factor receptor 2 precursor (EC 2.7.10.1)(VEGFR-2) (Kinase insert domain receptor) (Protein-tyrosine kinasereceptor Flk-1) (CD309 antigen).
8,11	VGFR2_1207_1219_C1208S	VSDPKFHYDNTAG	[1214]	1000	P35968	Vascular endothelial growth factor receptor 2 precursor (EC 2.7.10.1)(VEGFR-2) (Kinase insert domain receptor) (Protein-tyrosine kinasereceptor Flk-1) (CD309 antigen).
8,12	VGFR2_944_956	RFRQGKDYVGAIP	[951]	1000	P35968	Vascular endothelial growth factor receptor 2 precursor (EC 2.7.10.1)(VEGFR-2) (Kinase insert domain receptor) (Protein-tyrosine kinasereceptor Flk-1) (CD309 antigen).
8,13	VGFR2_989_1001	EEAPEDLYKDFLT	[996]	1000	P35968	Vascular endothelial growth factor receptor 2 precursor (EC 2.7.10.1)(VEGFR-2) (Kinase insert domain receptor) (Protein-tyrosine kinasereceptor Flk-1) (CD309 antigen).
8,14	VGFR3_1061_1073	DIYKDPDYVRKGS	[1063, 1068]	1000	P35916	Vascular endothelial growth factor receptor 3 precursor (EC 2.7.10.1)(VEGFR-3) (Tyrosine-protein kinase receptor FLT4).
9,1	VINC_815_827	KSFLDSGYRILGA	[822]	1000	P18206	Vinculin (Metavinculin).
9,2	ZAP70_485_497	ALGADDSYYTARS	[492, 493]	1000	P43403	Tyrosine-protein kinase ZAP-70 (EC 2.7.10.2) (70 kDa zeta-associatedprotein) (Syk-related tyrosine kinase).
9,3	ZBT16_621_633	LRTHNGASPYQCT	[630]	1000	Q05516	Zinc finger and BTB domain-containing protein 16 (Zinc finger proteinPLZF) (Promyelocytic leukemia zinc finger protein) (Zinc fingerprotein 145).
9,4	FGFR1_761_773	TSNQEYLDLSMPL	[766]	1000	P11362	Basic fibroblast growth factor receptor 1 precursor (EC 2.7.10.1)(FGFR-1) (bFGF-R) (Fms-like tyrosine kinase 2) (c-fgr) (CD331antigen).

9,5	PGFRB_1014_1028	PNEGNDNDYIPLDP	[1021]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor(EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).
9,6	ERBB2_1241_1253	PTAENPEYLGLDV	[1248]	1000	P04626	Receptor tyrosine-protein kinase erbB-2 precursor (EC 2.7.10.1)(p185erbB2) (C-erbB-2) (NEU proto-oncogene) (Tyrosine kinase-type cell surface receptor HER2) (MLN 19) (CD340 antigen).
9,7	KSYK_518_530	ALRADENYYKAQT	[525, 526]	1000	P43405	Tyrosine-protein kinase SYK (EC 2.7.10.2) (Spleen tyrosine kinase).
9,8	MK12_178_190	ADSEMTGYVVTRW	[185]	1000	P53778	Mitogen-activated protein kinase 12 (EC 2.7.11.24) (Extracellular signal-regulated kinase 6) (ERK-6) (ERK5) (Stress-activated protein kinase 3) (Mitogen-activated protein kinase p38 gamma) (MAP kinase p38 gamma).
9,9	MK14_173_185	RHTDDEMTGYVAT	[182]	1000	Q16539	Mitogen-activated protein kinase 14 (EC 2.7.11.24) (Mitogen-activated protein kinase p38 alpha) (MAP kinase p38 alpha) (Cytokine suppressive anti-inflammatory drug-binding protein) (CSAID-binding protein) (CSBP) (MAX-interacting protein 2) (MAP kinase MXI2) (SAPK2A).
9,10	PGFRB_572_584	VSSDGHEYIYVDP	[579, 581]	1000	P09619	Beta-type platelet-derived growth factor receptor precursor(EC 2.7.10.1) (PDGF-R-beta) (CD140b antigen).
9,11	TEC_512_524	RYFLDDQYTSSSG	[513, 519]	1000	P42680	Tyrosine-protein kinase Tec (EC 2.7.10.2).
9,12	VGFR1_1235_1247	ATSMFDDYQGDS	[1242]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-protein kinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-like tyrosine kinase 1).
9,13	VGFR2_1168_1180	AQQDGKDYIVLPI	[1175]	1000	P35968	Vascular endothelial growth factor receptor 2 precursor (EC 2.7.10.1)(VEGFR-2) (Kinase insert domain receptor) (Protein-tyrosine kinase receptor Flk-1) (CD309 antigen).
9,14	ANXA1_14_26	IENEEQEYVQTVK	[21]	1000	P04083	Annexin A1 (Annexin-1) (Annexin I) (Lipocortin I) (Calpactin II) (Chromobindin-9) (p35) (Phospholipase A2 inhibitory protein).
10,1	EGFR_1165_1177	ISLDNPDYQQDFF	[1172]	1000	P00533	Epidermal growth factor receptor precursor (EC 2.7.10.1) (Receptor tyrosine-protein kinase ErbB-1).
10,2	EPOR_419_431	ASAASFEYTILD	[426]	1000	P19235	Erythropoietin receptor precursor (EPO-R).
10,3	ERBB4_1277_1289	IVAENPEYLSEFS	[1284]	1000	Q15303	Receptor tyrosine-protein kinase erbB-4 precursor (EC 2.7.10.1)(p180erbB4) (Tyrosine kinase-type cell surface receptor HER4).
10,4	FGFR2_762_774	TLTTNEEYLDLSQ	[769]	1000	P21802	Fibroblast growth factor receptor 2 precursor (EC 2.7.10.1) (FGFR-2) (Keratinocyte growth factor receptor 2) (CD332 antigen).
10,5	FGFR3_753_765	TVTSTDEYLDLSA	[760]	1000	P22607	Fibroblast growth factor receptor 3 precursor (EC 2.7.10.1) (FGFR-3) (CD333 antigen).
10,6	P85A_600_612	NENTEDQYSLVED	[607]	1000	P27986	Phosphatidylinositol 3-kinase regulatory subunit alpha (PI3-kinase p85 subunit alpha) (PtdIns-3-kinase p85-alpha) (PI3K).
10,7	PDPK1_369_381	DEDCYGNYNLLS	[373, 376]	1000	O15530	3-phosphoinositide-dependent protein kinase 1 (EC 2.7.11.1) (hPDK1).
10,8	AKT1_170_182	KATGRYYAMKILK	[175, 176]	1000	P31749	RAC-alpha serine/threonine-protein kinase á (EC:2.7.11.1) (PKB, RAC)
10,9	AKT1_309_321_C310S	FSGTPEYLAPEVL	[315]	1000	P31749	RAC-alpha serine/threonine-protein kinase á (EC:2.7.11.1) (PKB, RAC)
10,10	AKT1_320_332	VLEDNDYGRAVDW	[326]	1000	P31749	RAC-alpha serine/threonine-protein kinase á (EC:2.7.11.1) (PKB, RAC)
10,11	ARAF_297_307	RDSGYWVPP	[301, 302]	1000	P10398	Serine/threonine-protein kinase A-Raf á (EC:2.7.11.1), (ARAF1, PKS, PK2)

10,12	BTLA_252_262	KPGIVYASLNH	[257]	1000	Q7Z6A9	B- and T-lymphocyte attenuator,B- and T-lymphocyte-associated protein,CD272
10,13	CD28_185_197	RLHSDYMNMTPR	[191]	1000	áP10747	T-cell-specific surface glycoprotein CD28, TP44, CD28
10,14	CD28_203_215	RKHYQPYAPPRDF	[206, 209]	1000	áP10747	T-cell-specific surface glycoprotein CD28, TP44, CD28
11,1	CD3E_182_194	PVPNPDIYEPIRKG	[188]	1000	P07766	T-cell surface glycoprotein CD3 epsilon chain, T-cell surface antigen T3/Leu-4 epsilon chain, CD3e
11,2	CD3E_193_205	KGQRDLYSGLNQR	[199]	1000	P07766	T-cell surface glycoprotein CD3 epsilon chain, T-cell surface antigen T3/Leu-4 epsilon chain, CD3e
11,3	CD3Z_135_147	KGHDGLYQGLSTA	[142]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
11,4	CD3Z_147_159	TATKDTYDALHMQ	[153]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
11,5	CD70_9_21_C17S	SVRRRPYGSVLRA	[15]	1000	P32970	CD70 antigen, CD27 ligand , Tumor necrosis factor ligand superfamily member 7
11,6	CDK1_9_21	KIGEGTYGVVYKG	[15, 19]	1000	P06493	Cyclin-dependent kinase 1á(EC:2.7.11.22,áEC:2.7.11.23), Cell division protein kinase 1, Cell division control protein 2 homolog, (p34 protein kinase)(CDK1)
11,7	CDK4_11_23	EIGVGAYGTVYKA	[17, 21]	1000	P11802	Cyclin-dependent kinase 4á(EC:2.7.11.22) ,Cell division protein kinase 4 (PSK-J3)
11,8	ERBB3_1283_1295	PASEQGYEEMRAF	[1289]	1000	áP21860	Receptor tyrosine-protein kinase erbB-3 (EC:2.7.10.1), Proto-oncogene-like protein c-ErbB-3 , Tyrosine kinase-type cell surface receptor HER3
11,9	FYN_525_537	TATEPQYQPGENL	[531]	1000	P06241	Tyrosine-protein kinase Fyná(EC:2.7.10.2), Proto-oncogene Syn, Proto-oncogene c-Fyn, Src-like kinase
11,10	GAB2_638_648	DEKVDYVQVDK	[643]	1000	Q9UQC2	GRB2-associated-binding protein 2, GRB2-associated binder 2, Growth factor receptor bound protein 2-associated protein 2
11,11	GSK3B_210_222_C218S	GEPNVSYISSRY	[216, 221, 222]	1000	P49841á	Glycogen synthase kinase-3 beta (EC:2.7.11.26), Serine/threonine-protein kinase GSK3B (EC:2.7.11.1)
11,12	IRS2_626_638	HPYPEDYGDIEIG	[628, 632]	1000	Q9Y4H2á	Insulin receptor substrate 2
11,13	JAK1_214_226	DISYKRYIPETLN	[217, 220]	1000	P23458	Tyrosine-protein kinase JAK1 (EC 2.7.10.2) (Janus kinase 1) (JAK-1).
11,14	JAK2_1001_1013	LPQDKKEYKVKEP	[1007,	1000	O60674	Tyrosine-protein kinase JAK2 (EC 2.7.10.2) (Janus kinase 2) (JAK-2).
12,1	JAK3_974_986	LPLDKDYVVREP	[980, 981]	1000	P52333áá	Tyrosine-protein kinase JAK3 (EC:2.7.10.2) (Janus kinase 3) (JAK-3).
12,2	KIT_930_942_C942S	ESTNHIYSNLANS	[936]	1000	áP10721á	Mast/stem cell growth factor receptor Kit (EC:2.7.10.1), CD117
12,3	LYN_391_403	VIEDNEYTAREGA	[397]	1000	P07948á	Tyrosine-protein kinase Lyn (EC:2.7.10.2)
12,4	LYN_501_512	YTATEGQYQQQP	[501, 508]	1000	P07948á	Tyrosine-protein kinase Lyn (EC:2.7.10.2)
12,5	MAPK3_198_210_C203S	ALQTPSYTPYYVA	[204, 207, 208]	1000	Q16644	MAP kinase-activated protein kinase 3 (EC:2.7.11.1)
12,6	MET_1228_1240	DMYDKEYYSVHNK	[1230, 1234, 1235]	1000	P08581	Hepatocyte growth factor receptor precursor (EC 2.7.10.1) (HGFreceptor) (Scatter factor receptor) (SF receptor) (HGF/SF receptor)(Met proto-oncogene tyrosine kinase) (c-Met).
12,7	MET_1360_1370_C1361S	KSVAPYPSLLS	[1365]	1000	P08581	Hepatocyte growth factor receptor precursor (EC 2.7.10.1) (HGFreceptor) (Scatter factor receptor) (SF receptor) (HGF/SF receptor)(Met proto-oncogene tyrosine kinase) (c-Met).
12,8	MK01_200_209	LNSKGYTKSI	[205]	1000	P28482	Mitogen-activated protein kinase 1 (EC 2.7.11.24) (Extracellular signal-regulated kinase 2) (ERK-2) (Mitogen-activated protein kinase 2) (MAP kinase 2) (MAPK 2) (p42-MAPK) (ERT1).

12,9	MK03_199_208	GFLTEYVATR	[204]	1000	P27361	Mitogen-activated protein kinase 3 (EC:2.7.11.24), (Extracellular signal-regulated kinase 1) (ERK-1)(Mitogen-activated protein kinase 3) (MAP kinase 3)(p44-MAPK) (ERT2)
12,10	MK08_181_191	MMTPYVVTRY	[185, 190, 191]	1000	P45983	Mitogen-activated protein kinase 8 (EC 2.7.11.24) (MAP kinase 8)(MAPK 8)
12,11	MK12_180_189_M182B	SEBTGYVVTR	[185]	1000	P53778	Mitogen-activated protein kinase 12 (EC 2.7.11.24) (Extracellular signal-regulated kinase 6) (ERK-6) (ERK5) (Stress-activated protein kinase 3) (Mitogen-activated protein kinase p38 gamma) (MAP kinase p38gamma).
12,12	MK14_177_187	DEMTGYVATRW	[182]	1000	Q16539	Mitogen-activated protein kinase 14 (EC 2.7.11.24) (Mitogen-activated protein kinase p38 alpha) (MAP kinase p38 alpha) (Cytokine suppressive anti-inflammatory drug-binding protein) (CSAID-binding protein) (CSBP)(MAX-interacting protein 2) (MAP kinase MXI2) (SAPK2A).
12,13	PDCD1_221_229_FS219_22 OKK	KKVDYGELDFQ	[223]	1000	Q15116	Programmed cell death protein 1, (Protein PD-1) (CD279)
12,14	PECA1_708_718	DTETVYSEVRK	[713]	1000	P16284	Platelet endothelial cell adhesion molecule precursor (PECAM-1)(EndoCAM) (GPIIA') (CD31 antigen).
13,1	PLCG1_777_789	GRNPGFYVEANPM	[783]	1000	P19174	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1 (EC 3.1.4.11) (Phosphoinositide phospholipase C) (PLC-gamma-1)(Phospholipase C-gamma-1) (PLC-II) (PLC-148).
13,2	PLCG2_1211_1223	NNQLFLYDTHQNL	[1217]	1000	P16885	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2 (EC:3.1.4.11) (Phosphoinositide phospholipase C-gamma-2) (PLC-IV) (Phospholipase C-gamma-2)(PLC-gamma-2)
13,3	PTN11_541_551	RKGHEYTNIKY	[546, 551]	1000	Q06124	Tyrosine-protein phosphatase non-receptor type 11 (EC 3.1.3.48)(Protein-tyrosine phosphatase 2C) (PTP-2C) (PTP-1D) (SH-PTP3) (SH-PTP2) (SHP-2) (Shp2).
13,4	PTN11_57_67	QNTGDYYDLYG	[62, 63, 66]	1000	Q06124	Tyrosine-protein phosphatase non-receptor type 11 (EC 3.1.3.48)(Protein-tyrosine phosphatase 2C) (PTP-2C) (PTP-1D) (SH-PTP3) (SH-PTP2) (SHP-2) (Shp2).
13,5	PTN6_531_541	GQSEYGNITY	[536, 541]	1000	P29350	Tyrosine-protein phosphatase non-receptor type 6 (EC:3.1.3.48)
13,6	PTN6_558_570	KHKEDVYENLHTK	[564]	1000	P29350	Tyrosine-protein phosphatase non-receptor type 6 (EC:3.1.3.48)
13,7	SHC1_309_321	ELRFKQYLRNPPK	[315]	1000	P29353	SHC-transforming protein 1
13,8	SRC_524_536	TSTEPQYQGENL	[530]	1000	P12931	Proto-oncogene tyrosine-protein kinase Src (EC:2.7.10.2) (Proto-oncogene c-Src)(pp60c-src)(p60-Src)
13,9	STAT2_684_696	LQERRKYLKHRLI	[690]	1000	P52630	Signal transducer and activator of transcription 2 (p113)
13,10	TIE2_986_998	SRGQEVYVKKTMG	[992]	1000	Q02763	Angiopoietin-1 receptor (EC:2.7.10.1)
13,11	TYK2_1048_1060	VPEGHEYRVRED	[1054,	1000	P29597	Non-receptor tyrosine-protein kinase TYK2 (EC:2.7.10.2)
13,12	VGFR1_1320_1332_C1320K/C1321K	KKSPPPDYNSVVL	[1327]	1000	P17948	Vascular endothelial growth factor receptor 1 precursor (EC 2.7.10.1)(VEGFR-1) (Vascular permeability factor receptor) (Tyrosine-protein kinase receptor FLT) (Flt-1) (Tyrosine-protein kinase FRT) (Fms-like tyrosine kinase 1).
13,13	VISTA_260_270	RHPLSYVAQRQ	[265]	1000	Q9H7M9	V-type immunoglobulin domain-containing suppressor of T-cell activation
13,14	YES_420_432	LIEDNEYTARQGA	[426]	1000	P07947	Tyrosine-protein kinase Yes (EC:2.7.10.2)(Proto-oncogene c-Yes)(p61-Yes)

14,1	CD79A_181_193	EYEDENLYEGLNL	[182, 188]	1000	P11912	B-cell antigen receptor complex-associated protein alpha-chainprecursor (Ig-alpha) (MB-1 membrane glycoprotein) (Surface IgM-associated protein) (Membrane-bound immunoglobulin-associated protein)(CD79a antigen).
14,2	CD3Z_77_89	LGRREEYDVLDKR	[83]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
14,3	CD3Z_105_117	NPQEGLYNELQKD	[111]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
14,4	CD3Z_117_129	DKMAEAYSEIGMK	[123]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).
14,5	MUSK_548_560	LHPNPMYQRMPLL	[554]	1000	O15146	Muscle, skeletal receptor tyrosine-protein kinase (EC:2.7.10.1)
14,6	ODBA_340_352_D340K	KDSSAYRSVDEVN	[345]	1000	P12694	2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial (EC:1.2.4.4) (BCKDE1A)
14,7	GAB1_622_632	DKQVEYLDLDL	[627]	1000	Q13480	GRB2-associated-binding protein 1, GRB2-associated binder 1, Growth factor receptor bound protein 2-associated protein 1
14,8	HAVR2_257_267	GIRSEENIYTI	[265]	1000	Q8TDQ0	Hepatitis A virus cellular receptor 2, T-cell immunoglobulin and mucin domain-containing protein 3,T-cell membrane protein 3
14,9	IRS1_890_902	PKSPGEYVNIEFG	[896]	1000	P35568	Insulin receptor substrate 1
14,10	ZAP70_313_325	SVYESPYSDPEEL	[315, 319]	1000	P43403	Tyrosine-protein kinase ZAP-70 (EC 2.7.10.2) (70 kDa zeta-associatedprotein) (Syk-related tyrosine kinase).
14,11	MPZL1_236_246	QGPVIYAQLDH	[241]	1000	O95297	Myelin protein zero-like protein 1
14,12	PLCG2_1191_1203_C1200S	ESEELYSSSRQL	[1197]	1000	P16885	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2 (EC:3.1.4.11) (Phosphoinositide phospholipase C-gamma-2) (PLC-IV) (Phospholipase C-gamma-2)(PLC-gamma-2)
14,13	PTN11_580_590	SARVYENVGLM	[584]	1000	Q06124	Tyrosine-protein phosphatase non-receptor type 11 (EC 3.1.3.48)(Protein-tyrosine phosphatase 2C) (PTP-2C) (PTP-1D) (SH-PTP3) (SH-PTP2) (SHP-2) (Shp2).
14,14	ENOG_37_49	SGASTGIYEAL	[44]	1000	P09104	Gamma-enolase (EC 4.2.1.11) (2-phospho-D-glycerate hydro-lyase)(Neural enolase) (Neuron-specific enolase) (NSE) (Enolase 2).