

Row	Col	ID	Sequence	Ser	Thr	SpotConc	Uniprot Accession	Description	Xoff	Yoff
-1	-1	#REF	NA	NA	NA	NA	NA	NA	0	0
-3	-1	#REF	NA	NA	NA	NA	NA	NA	0	0
-5	-1	#REF	NA	NA	NA	NA	NA	NA	0	0
-3	-2	#REF	NA	NA	NA	NA	NA	NA	0	0
-2	20	#REF	NA	NA	NA	NA	NA	NA	0	0
-4	20	#REF	NA	NA	NA	NA	NA	NA	0	0
-6	20	#REF	NA	NA	NA	NA	NA	NA	0	0
-6	19	#REF	NA	NA	NA	NA	NA	NA	0	0
1	1	pTY3H_64_78	RFIGRRQ(pS)LIE DARK	[71]	[]	50	P07101	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH).	0	0
1	2	ATF2_47_59	VADQTPTPTRL K	[]	[51, 53, 55]	1000	P15336	Cyclic AMP-dependent transcription factor ATF-2 (Activating transcription factor 2) (cAMP response element-binding protein CRE-BP1) (HB16).	0	0
1	3	CDN1A_139_151	GRKRRQTSMTD FY	[146]	[145, 148]	1000	P38936	Cyclin-dependent kinase inhibitor 1 (p21) (CDK-interacting protein 1) (Melanoma differentiation-associated protein 6) (MDA-6).	0	0
1	4	FIBA_569_581	EFPSRGKSSSYSK	[572, 576, 577, 578, 580]	[]	1000	P02671	Fibrinogen alpha chain precursor [Contains: Fibrinopeptide A].	0	0
1	5	IKKB_173_185_C17 9A	LDQGLSLSFV T	[177, 181]	[180, 185]	1000	O14920	Inhibitor of nuclear factor kappa-B kinase subunit beta (I-kappa-B-kinase beta) (IkbKB) (IKK-beta) (IKK-B) (EC=2.7.11.10) (I-kappa-B kinase 2) (IKK2) (Nuclear factor NF-kappa-B inhibitor kinase beta) (NFKBIKB).	0	0
1	6	LIPS_944_956	GFHPRRSSQGAT Q	[950, 951]	[955]	1000	Q05469	Hormone-sensitive lipase (HSL) (EC=3.1.1.79).	0	0
1	7	MYBB_513_525	DNTPHTPTPFKN A	[]	[515, 518, 520]	1000	P10244	Myb-related protein B (B-Myb).	0	0
1	8	PLEK_106_118	GQKFARKSTRRSI	[113, 117]	[114]	1000	P08567	Pleckstrin (Platelet p47 protein).	0	0

1	9	RBL2_632_644	DEICIAGSPLTPR	[639]	[642]	1000	Q08999	Retinoblastoma-like protein 2 (130 kDa retinoblastoma-associated protein) (p130) (PRB2) (RBR-2).	0	0
1	10	VIGLN_289_301	EEKKKKTITIAVE	[]	[295, 296, 297]	1000	Q00341	Vigilin (High density lipoprotein-binding protein) (HDL-binding protein).	0	0
1	11	GRIK2_708_720	FMSSRRQSVLVK S	[710, 711, 715, 720]	[]	200	Q13002	Glutamate receptor, ionotropic kainate 2 precursor (Glutamate receptor6) (GluR-6) (GluR6) (Excitatory amino acid receptor 4) (EAA4).	0	0
1	12	RADI_559_569	RDKYKTLRQIR	[]	[564]	200	P35241	Radixin.	0	0
2	1	ACM1_421_433	CNKAFRDTFRLLL	[]	[428]	1000	P11229	Muscarinic acetylcholine receptor M1.	0	0
2	2	ATM_1972_1984	KRSLAFEEGSQST	[1974, 1981, 1983]	[198 4]	1000	Q13315	Serine-protein kinase ATM (EC=2.7.11.1) (Ataxia telangiectasia mutated) (A-T, mutated).	0	0
2	3	CDN1B_151_163	IRKRPATDDSS Q	[160, 161]	[157, 162]	1000	P46527	Cyclin-dependent kinase inhibitor 1B (Cyclin-dependent kinase inhibitor p27) (p27Kip1).	0	0
2	4	FOXO3_25_37	QSRPRCTWPLQ R	[26, 30]	[32]	1000	O43524	Forkhead box protein O3 (Forkhead in rhabdomyosarcoma-like 1) (AF6q21 protein).	0	0
2	5	IKKB_686_698	QLMSQPSTASNS L	[689, 692, 695, 697]	[693]	1000	O14920	Inhibitor of nuclear factor kappa-B kinase subunit beta (I-kappa-B-kinase beta) (IKKB) (IKK-beta) (IKK-B) (EC=2.7.11.10) (I-kappa-B kinase 2) (IKK2) (Nuclear factor NF-kappa-B inhibitor kinase beta) (NFKB1KB).	0	0
2	6	LMNA_192_204	DAENRLQTMKE EL	[]	[199]	1000	P02545	Lamin-A/C (70 kDa lamin) (Renal carcinoma antigen NY-REN-32).	0	0
2	7	MYC_51_63	KKFELLTPPLSP	[62]	[58]	1000	P01106	Myc proto-oncogene protein (c-Myc) (Transcription factor p64).	0	0
2	8	PP2AB_297_309	EPHVTRRTPDYF L	[]	[301, 304]	1000	P62714	Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform (EC 3.1.3.16) (PP2A-beta).	0	0
2	9	RBL2_655_667	GLGRSITSPPTLY	[659, 662]	[661, 664, 665]	1000	Q08999	Retinoblastoma-like protein 2 (130 kDa retinoblastoma-associated protein) (p130) (PRB2) (RBR-2).	0	0
2	10	YAP1_121_133	QHVRHSSPASL Q	[127, 128, 131]	[]	1000	P46937	65 kDa Yes-associated protein (YAP65).	0	0
2	11	KAP2_92_104	SRFNRRVSVCAE T	[92, 99]	[104]	200	P13861	cAMP-dependent protein kinase type II-alpha regulatory subunit.	0	0

2	12	RS6_228_240	IAKRRRLSSLRAS	[235, 236, 240]	[]	200	P62753	40S ribosomal protein S6 (Phosphoprotein NP33).	0	0
3	1	ACM1_444_456	KIPKRPGSVHRT	[451]	[455]	1000	P11229	Muscarinic acetylcholine receptor M1.	0	0
3	2	BAD_112_124	RELRRMSDEFVDS	[118, 124]	[]	1000	Q92934	Bcl2 antagonist of cell death (BAD) (Bcl-2-binding component 6) (Bcl-XL/Bcl-2-associated death promoter) (Bcl-2-like 8 protein).	0	0
3	3	CENPA_1_14	MGPRRRSRKPEAPR	[7]	[]	1000	P49450	Histone H3-like centromeric protein A (Centromere protein A) (CENP-A)(Centromere autoantigen A).	0	0
3	4	FRAP_2443_2455	RTRTDSYSAGQSV	[2448, 2450, 2454]	[244, 4, 2446]	1000	P42345	FKBP12-rapamycin complex-associated protein (FK506-binding protein 12-rapamycin complex-associated protein 1) (Rapamycin target protein) (RAP1) (Mammalian target of rapamycin) (mTOR).	0	0
3	5	K6PL_766_778	LEHVTRRRLSMDK	[775]	[770, 773]	1000	P17858	6-phosphofructokinase, liver type (EC 2.7.1.11) (Phosphofructokinase1) (Phosphohexokinase) (Phosphofructo-1-kinase isozyme B) (PFK-B).	0	0
3	6	LMNB1_16_28	GGPTTPLSPTRL	[23, 28]	[19, 20, 25]	1000	P20700	Lamin-B1.	0	0
3	7	NEK2_172_184	FAKTFVGTPYYMS	[184]	[175, 179]	1000	P51955	Serine/threonine-protein kinase Nek2 (EC 2.7.11.1) (NimA-related protein kinase 2) (NimA-like protein kinase 1) (HSPK 21).	0	0
3	8	PPR1A_28_40	QIRRRRPTPATLV	[]	[35, 38]	1000	Q13522	Protein phosphatase 1 regulatory subunit 1A (Protein phosphataseinhibitor 1) (IPP-1) (I-1).	0	0
3	9	RBL2_959_971	DRTSRDSSPVMRS	[962, 965, 966, 971]	[961]	1000	Q08999	Retinoblastoma-like protein 2 (130 kDa retinoblastoma-associated protein) (p130) (PRB2) (RBR-2).	0	0
3	10	ADRB2_338_350	ELLCLRSSLKAY	[345, 346]	[]	200	P07550	Beta-2 adrenergic receptor (Beta-2 adrenoceptor) (Beta-2adrenoreceptor).	0	0
3	11	KCC2G_278_289	VASMMHRQETVE	[280]	[287]	200	Q13555	Calcium/calmodulin-dependent protein kinase type II gamma chain (EC 2.7.11.17) (CaM-kinase II gamma chain) (CaM kinase II subunit gamma) (CaMK-II subunit gamma).	0	0
3	12	RYR1_4317_4329	VRRLRLTAREA	[]	[432, 4]	200	P21817	Ryanodine receptor 1 (Skeletal muscle-type ryanodine receptor) (RyR1)(RYR-1) (Skeletal muscle calcium release channel).	0	0

4	1	ACM4_456_468	CNATFKKTFRHLL	[]	[459, 463]	1000	P08173	Muscarinic acetylcholine receptor M4.	0	0
4	2	BAD_69_81	IRSRHSSYPAGTE	[71, 74, 75]	[80]	1000	Q92934	Bcl2 antagonist of cell death (BAD) (Bcl-2-binding component 6) (Bcl-XL/Bcl-2-associated death promoter) (Bcl-2-like 8 protein).	0	0
4	3	COF1_17_29	DMKVRKSSTPEEV	[23, 24]	[25]	1000	P23528	Cofilin-1 (Cofilin, non-muscle isoform) (18 kDa phosphoprotein) (p18).	0	0
4	4	FRAP_2475_2487	VPESIHSFIGDGL	[2478, 2481]	[]	1000	P42345	FKBP12-rapamycin complex-associated protein (FK506-binding protein 12-rapamycin complex-associated protein 1) (Rapamycin target protein) (RAPT1) (Mammalian target of rapamycin) (mTOR).	0	0
4	5	KAPCG_192_206	VKGRTWTLCGTP EYL	[]	[196, 198, 202]	1000	P22612	cAMP-dependent protein kinase catalytic subunit gamma (EC 2.7.11.11)(PKA C-gamma).	0	0
4	6	MARCS_152_164	KKKKKRFSFKSF	[159, 163]	[]	1000	P29966	Myristoylated alanine-rich C-kinase substrate (MARCKS) (Protein kinaseC substrate, 80 kDa protein, light chain) (PKCSL) (80K-L protein).	0	0
4	7	NEK3_158_170	FACTYVGTPIYV P	[]	[161, 165]	1000	P51956	Serine/threonine-protein kinase Nek3 (EC 2.7.11.1) (NimA-related protein kinase 3) (HSPK 36).	0	0
4	8	PRKDC_2618_2630	TRTQEGSL SARW P	[2624, 2626]	[261 8, 2620]	1000	P78527	DNA-dependent protein kinase catalytic subunit (DNA-PK catalytic subunit) (DNA-PKcs) (EC=2.7.11.1) (DNPK1) (p460).	0	0
4	9	REL_260_272	KMQLRRPSDQEV S	[267, 272]	[]	1000	Q04864	C-Rel proto-oncogene protein (C-Rel protein).	0	0
4	10	ART_025_CXGLRR WSLGGLRRWSL	GLRRWSL GGLRR WSL	NA	NA	200	NA	NA	0	0
4	11	KCNA1_438_450	DSDLR RRSSTM S	[439, 442, 445, 446, 447, 450]	[448]	200	Q09470	Potassium voltage-gated channel subfamily A member 1 (Voltage-gated potassium channel subunit Kv1.1) (HUK1) (HBK1).	0	0
4	12	SCN7A_898_910	KNGCRRGSSLGQ I	[905, 906]	[]	200	Q01118	Sodium channel protein type 7 subunit alpha (Sodium channel proteintype VII subunit alpha) (Putative voltage-gated sodium channel subunit alpha Nax) (Sodium channel protein cardiac and skeletal muscle subunit alpha).	0	0

5	1	ACM5_494_506	CYALCNRTFRKTF	[]	[501, 505]	1000	P08912	Muscarinic acetylcholine receptor M5.	0	0
5	2	BAD_93_105	FRGRSRSAPPNLW	[97, 99]	[]	1000	Q92934	Bcl2 antagonist of cell death (BAD) (Bcl-2-binding component 6) (Bcl-XL/Bcl-2-associated death promoter) (Bcl-2-like 8 protein).	0	0
5	3	CSF1R_701_713	NIHLEKKYVRRDS	[713]	[]	1000	P07333	Macrophage colony-stimulating factor 1 receptor precursor(EC 2.7.10.1) (CSF-1-R) (Fms proto-oncogene) (c-fms) (CD115 antigen).	0	0
5	4	GPR6_349_361	QSKVPFRSRSPSE	[350, 356, 358, 360]	[]	1000	P46095	Sphingosine 1-phosphate receptor GPR6 (G-protein coupled receptor 6).	0	0
5	5	KCNA2_442_454	PDLKRSASTIS	[447, 449, 451, 454]	[452]	1000	P16389	Potassium voltage-gated channel subfamily A member 2 (Voltage-gatedpotassium channel subunit Kv1.2) (HBK5) (NGK1) (HUKIV).	0	0
5	6	MARCS_160_172	FKKSFKLSGFSFK	[163, 167, 170]	[]	1000	P29966	Myristoylated alanine-rich C-kinase substrate (MARCKS) (Protein kinaseC substrate, 80 kDa protein, light chain) (PKCSL) (80K-L protein).	0	0
5	7	NMDZ1_890_902	SFKRRRSSKDTST	[890, 896, 897, 901]	[900, 902]	1000	Q05586	Glutamate [NMDA] receptor subunit zeta-1 precursor (N-methyl-D-aspartate receptor subunit NR1).	0	0
5	8	PTK6_436_448	ALRERLSSFTSYE	[442, 443, 446]	[445]	1000	Q13882	Tyrosine-protein kinase 6 (EC 2.7.10.2) (Breast tumor kinase)(Tyrosine-protein kinase BRK).	0	0
5	9	SRC_413_425	LIEDNEYTARQGA	[]	[420]	1000	P12931	Proto-oncogene tyrosine-protein kinase Src (EC 2.7.10.2) (p60-Src) (c-Src) (pp60c-src).	0	0
5	10	CAC1C_1974_1986	ASLGRRASFHLE C	[1975, 1981]	[]	200	Q13936	Voltage-dependent L-type calcium channel subunit alpha-1C (Voltage-gated calcium channel subunit alpha Cav1.2) (Calcium channel, L type,alpha-1 polypeptide, isoform 1, cardiac muscle).	0	0
5	11	KPB1_1011_1023	QVEFRRLSISAES	[1018, 1020, 1023]	[]	200	P46020	Phosphorylase b kinase regulatory subunit alpha, skeletal muscleisoform (Phosphorylase kinase alpha M subunit).	0	0
5	12	SRC8_CHICK_423_435	KTPSSPVYQDAVS	[426, 427, 435]	[424]	200	Q01406	Src substrate protein p85 (p80) (Cortactin).	0	0

6	1	ACM5_498_510	CNRTFRKTFKML L	[]	[501, 505]	1000	P08912	Muscarinic acetylcholine receptor M5.	0	0
6	2	BCKD_45_57	ERSKTVTSFYNQ S	[47, 52, 57]	[49, 51]	1000	O14874	[3-methyl-2-oxobutanoate dehydrogenase [lipoamide]] kinase,mitochondrial precursor (EC 2.7.11.4) (Branched-chain alpha- ketoaciddehydrogenase kinase) (BCKDHKIN) (BCKD-kinase).	0	0
6	3	CSK21_355_367	ISSVPTPSPLGPL	[356, 357, 362]	[360]	1000	P68400	Casein kinase II subunit alpha (EC 2.7.11.1) (CK II).	0	0
6	4	GPSM2_394_406	PKLGRRHSMEN ME	[401]	[]	1000	P81274	G-protein-signaling modulator 2 (Mosaic protein LGN).	0	0
6	5	KCNA3_461_473	EELRKARSNSTLS	[468, 470, 473]	[471]	1000	P22001	Potassium voltage-gated channel subfamily A member 3 (Voltage- gatedpotassium channel subunit Kv1.3) (HPCN3) (HGK5) (HuKIII) (HLK3).	0	0
6	6	MBP_222_234	HFFKNIVTPRTPP	[]	[229, 232]	1000	P02686	Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membraneencephalitogenic protein).	0	0
6	7	NOS3_1171_1183	SRIRTQSFSLQER	[1171, 1177, 1179]	[117 5]	1000	P29474	Nitric oxide synthase, endothelial (EC=1.14.13.39) (Endothelial NOS) (eNOS) (EC-NOS) (NOS type III) (NOSIII) (Constitutive NOS) (cNOS).	0	0
6	8	RAB1A_187_199	KSNVKIQSTPVK Q	[188, 194]	[195]	1000	P62820	Ras-related protein Rab-1A (YPT1-related protein).	0	0
6	9	STK6_283_295	SSRRTTLCGLDY	[283, 284]	[287, 288, 292]	1000	O14965	Serine/threonine-protein kinase 6 (EC 2.7.11.1) (Aurora kinase A)(Aurora- A) (Serine/threonine kinase 15) (Aurora/IPL1-related kinase 1)(Aurora- related kinase 1) (hARK1) (Breast tumor-amplified kinase).	0	0
6	10	CFTR_730_742	EPLERRLSLVPDS	[737, 742]	[]	200	P13569	Cystic fibrosis transmembrane conductance regulator (CFTR) (cAMP- dependent chloride channel) (ATP-binding cassette transporter sub-family C member 7).	0	0
6	11	MYPC3_268_280	LSAFRRTSLAGG G	[269, 275]	[274]	200	Q14896	Myosin-binding protein C, cardiac-type (Cardiac MyBP-C) (C- protein,cardiac muscle isoform).	0	0
6	12	VASP_271_283	LARRRKATQVGE K	[]	[278]	200	P50552	Vasodilator-stimulated phosphoprotein (VASP).	0	0
7	1	ADDB_696_708	GSPSKSPSKKKK	[697, 699,	[]	1000	P35612	Beta-adducin (Erythrocyte adducin subunit beta)	0	0

				701, 703]							
7	2	BRCA1_1451_1463	EKAULTSQKSSEY	[1457, 1460, 1461]	[1456]	1000	P38398	Breast cancer type 1 susceptibility protein (RING finger protein 53).	0	0	
7	3	DCX_49_61	HFDERDKTSRN MR	[57]	[56]	1000	O43602	Neuronal migration protein doublecortin (Lissencephalin-X) (Lis-X)(Doublin).	0	0	
7	4	GSUB_61_73	KKPRRKDTPALHI	[]	[68]	1000	O96001	G-substrate.	0	0	
7	5	KCNB1_489_501	KWTKRTLSETSSS	[496, 499, 500, 501]	[491, 494, 498]	1000	Q14721	Potassium voltage-gated channel subfamily B member 1 (Voltage-gatedpotassium channel subunit Kv2.1) (h-DRK1).	0	0	
7	6	MK10_214_226	AGTSFMMTPYV VT	[217]	[216, 221, 226]	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).	0	0	
7	7	NR4A1_344_356	GRRGRLPSKPKQ P	[351]	[]	1000	P22736	Nuclear receptor subfamily 4 group A member 1 (Orphan nuclear receptorHMR) (Early response protein NAK1) (TR3 orphan receptor) (ST-59).	0	0	
7	8	RAF1_253_265	QRQRSTSTPNVH M	[257, 259]	[258, 260]	1000	P04049	RAF proto-oncogene serine/threonine-protein kinase (EC 2.7.11.1) (Raf-1) (C-RAF) (cRaf).	0	0	
7	9	STMN2_90_102	AAGERRKSQEA QV	[97]	[]	1000	Q93045	Stathmin-2 (Protein SCG10) (Superior cervical ganglion-10 protein).	0	0	
7	10	CGHB_109_121	QCALCRRSTTDC G	[116]	[117, 118]	200	P01233	Choriogonadotropin subunit beta precursor (CG-beta) (Chorionicgonadotrophin chain beta).	0	0	
7	11	NCF1_296_308	RGAPPRSSIRN A	[303, 304]	[]	200	P14598	Neutrophil cytosol factor 1 (NCF-1) (Neutrophil NADPH oxidase factor1) (47 kDa neutrophil oxidase factor) (p47-phox) (NCF-47K) (47 kDaautosomal chronic granulomatous disease protein) (Nox organizer 2)(Nox-organizing protein 2) (SH3 and PX domain-containing protein 1A).	0	0	
7	12	VTNC_390_402	NQNSRRPSRAT WL	[393, 397]	[400]	200	P04004	Vitronectin precursor (Serum-spreading factor) (S-protein) (V75)[Contains: Vitronectin V65 subunit; Vitronectin V10 subunit;Somatomedin-B].	0	0	
8	1	ADDB_706_718	KKKFRTPSFLKKS	[713, 718]	[711]	1000	P35612	Beta-adducin (Erythrocyte adducin subunit beta)	0	0	

8	2	C1R_201_213	ASGYISSLEYPRS	[202, 206, 207, 213]	[]	1000	P00736	Complement C1r subcomponent (EC=3.4.21.41)	0	0
8	3	ELK1_356_368	LLPHTLTPVLLT	[]	[359, 361, 363, 368]	1000	P19419	ETS domain-containing protein Elk-1.	0	0
8	4	GYS2_1_13	MLRGRSLSVTSL G	[6, 8, 11]	[10]	1000	P54840	Glycogen [starch] synthase, liver (EC 2.4.1.11).	0	0
8	5	KIF11_919_931	LDIPTGTTPQRKS	[931]	[923, 925, 926]	1000	P52732	Kinesin-like protein KIF11 (Kinesin-related motor protein Eg5)(Kinesin-like spindle protein HKSP) (Thyroid receptor-interactingprotein 5) (TRIP-5) (Kinesin-like protein 1).	0	0
8	6	MP2K1_281_293	GDAAEPPRPRT P	[]	[286, 292]	1000	Q02750	Dual specificity mitogen-activated protein kinase kinase 1(EC 2.7.12.2) (MAP kinase kinase 1) (MAPKK 1) (ERK activator kinase 1)(MAPK/ERK kinase 1) (MEK1).	0	0
8	7	NTRK3_824_836	LHALGKATPIYLD	[]	[831]	1000	Q16288	NT-3 growth factor receptor precursor (EC 2.7.10.1) (Neurotrophictyrosine kinase receptor type 3) (TrkC tyrosine kinase) (GP145-TrkC)(Trk-C).	0	0
8	8	RAP1B_172_184	PGKARKKSSCQL L	[179, 180]	[]	1000	P61224	Ras-related protein Rap-1b precursor (GTP-binding protein smg p21B).	0	0
8	9	TAU_524_536	GSRSRTPSLPTPP	[525, 527, 531]	[529, 534]	1000	P10636	Microtubule-associated protein tau (Neurofibrillary tangle protein)(Paired helical filament-tau) (PHF-tau).	0	0
8	10	CREB1_126_138	EILSRRPSYRKIL	[129, 133]	[]	200	P16220	cAMP response element-binding protein (CREB).	0	0
8	11	NCF1_321_333	QDAYRRNSVRFL Q	[328]	[]	200	P14598	Neutrophil cytosol factor 1 (NCF-1) (Neutrophil NADPH oxidase factor1) (47 kDa neutrophil oxidase factor) (p47-phox) (NCF-47K) (47 kDaautosomal chronic granulomatous disease protein) (Nox organizer 2)(Nox-organizing protein 2) (SH3 and PX domain-containing protein 1A).	0	0
8	12	CFTR_761_773	LQARRRQSVLNL M	[768]	[]	200	P13569	Cystic fibrosis transmembrane conductance regulator (CFTR) (cAMP-dependent chloride channel) (ATP-binding cassette transporter sub-family C member 7).	0	0

9	1	AKT1_301_313	KDGATMKTFCG TP	[]	[305, 308, 312]	1000	P31749	RAC-alpha serine/threonine-protein kinase (EC 2.7.11.1) (RAC-PK-alpha)(Protein kinase B) (PKB) (C-AKT).	0	0
9	2	CA2D1_494_506	LEDIKRLTPRFTL	[]	[501, 505]	1000	P54289	Voltage-dependent calcium channel subunit alpha-2/delta-1 precursor(Voltage-gated calcium channel subunit alpha-2/delta-1) [Contains:Voltage-dependent calcium channel subunit alpha-2-1; Voltage-dependentcalcium channel subunit delta-1].	0	0
9	3	ELK1_410_422	ISVDGLSTPVVLS	[411, 416, 422]	[417]	1000	P19419	ETS domain-containing protein Elk-1.	0	0
9	4	H2B1B_27_40	GKKRKRSRKESYS I	[33, 37, 39]	[]	1000	P33778	Histone H2B type 1-B (H2B.f) (H2B/f) (H2B.1).	0	0
9	5	KIF2C_105_118_S1 06G	EGLRSRSTRMST VS	[109, 111, 115, 118]	[112, 116]	1000	Q99661	Kinesin-like protein KIF2C (Mitotic centromere-associated kinesin)(MCAK) (Kinesin-like protein 6).	0	0
9	6	MP2K1_287_299	PPRPRTPGRPLSS	[298, 299]	[292]	1000	Q02750	Dual specificity mitogen-activated protein kinase kinase 1(EC 2.7.12.2) (MAP kinase kinase 1) (MAPKK 1) (ERK activator kinase 1)(MAPK/ERK kinase 1) (MEK1).	0	0
9	7	P53_12_24	PPLSQETFSDLW K	[15, 20]	[18]	1000	P04637	Cellular tumor antigen p53 (Tumor suppressor p53) (Phosphoprotein p53)(Antigen NY-CO-13).	0	0
9	8	RB_242_254	AVIPINGSRTPR	[249]	[252]	1000	P06400	Retinoblastoma-associated protein (PP110) (P105-RB) (RB).	0	0
9	9	TLE2_246_258	EPPSPATTPCGK V	[249]	[252, 253]	1000	Q04725	Transducin-like enhancer protein 2 (ESG2).	0	0
9	10	DESP_2842_2854	RSGSRRGSFDAT G	[2843, 2845, 2849]	[285 3]	200	P15924	Desmoplakin (DP) (250/210 kDa paraneoplastic pemphigus antigen).	0	0
9	11	NFKB1_330_342	FVQLRRKSDLETS	[337, 342]	[341]	200	P19838	Nuclear factor NF-kappa-B p105 subunit (DNA-binding factor KBF1) (EBP-1) [Contains: Nuclear factor NF-kappa-B p50 subunit].	0	0

9	12	F263_454_466	NPLMRRNSVTPL A	[461]	[463]	200	Q16875	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 (6PF-2-K/Fru-2,6-P2ASE brain/placenta-type isozyme) (iPFK-2) (Renal carcinomaantigen NY-REN-56) [Includes: 6-phosphofructo-2-kinase (EC 2.7.1.105);Fructose-2,6-bisphosphatase (EC 3.1.3.46)].	0	0
10	1	ANDR_785_797	VRMRHLSQEFG WL	[791]	[]	1000	P10275	Androgen receptor (Dihydrotestosterone receptor) (Nuclear receptor subfamily 3 group C member 4).	0	0
10	2	CD27_212_224	HQRRKYRSNKGE S	[219, 224]	[]	1000	P26842	CD27 antigen precursor (CD27L receptor) (T-cell activation antigenCD27) (T14) (Tumor necrosis factor receptor superfamily member 7).	0	0
10	3	ERBB2_679_691	QQKIRKYTMRRLL	[]	[686]	1000	P04626	Receptor tyrosine-protein kinase erbB-2 precursor (EC 2.7.10.1)(p185erbB2) (C-erbB-2) (NEU proto-oncogene) (Tyrosine kinase-type cellsurface receptor HER2) (MLN 19) (CD340 antigen).	0	0
10	4	H32_3_18	RTKQTARKSTGG KAPR	[11]	[4, 7, 12]	1000	Q71DI3	Histone H3.2 (H3/m) (H3/o).	0	0
10	5	KPCB_19_31_A25S	RFARKGSLRQKN V	[25]	[]	1000	P05771	Protein kinase C beta type (EC 2.7.11.13) (PKC-beta) (PKC-B).	0	0
10	6	MPH6_140_152	EDENGDITPIKAK	[]	[147]	1000	Q99547	M-phase phosphoprotein 6.	0	0
10	7	P53_308_323	LPNNTSSSPQPK KKPL	[313, 314, 315]	[312]	1000	P04637	Cellular tumor antigen p53 (Tumor suppressor p53) (Phosphoprotein p53)(Antigen NY-CO-13).	0	0
10	8	RB_350_362	SFETQRTPRKSNL	[350, 360]	[353, 356]	1000	P06400	Retinoblastoma-associated protein (PP110) (P105-RB) (RB).	0	0
10	9	TOP2A_1463_1475	RRKRKPSTSDDS D	[1469, 1471, 1474]	[147 0]	1000	P11388	DNA topoisomerase 2-alpha (EC=5.99.1.3) (DNA topoisomerase II, alpha isozyme).	0	0
10	10	E1A_ADE05_212_224	AILRRPTSPVSRE	[219, 222]	[218]	200	P03255	Early E1A 32 kDa protein.	0	0
10	11	PLM_76_88	EEGTFRSSIRRLS	[82, 83, 88]	[79]	200	O00168	Phospholemman precursor (FXVD domain-containing ion transportregulator 1).	0	0
10	12	KAP3_107_119	NRFTRRASVCAE A	[114]	[110]	200	P31323	cAMP-dependent protein kinase type II-beta regulatory subunit.	0	0
11	1	ANXA1_209_221	AGERRKGTDVN VF	[]	[216]	1000	P04083	Annexin A1 (Annexin-1) (Annexin I) (Lipocortin I) (Calpactin II)(Chromobindin-9) (p35) (Phospholipase A2 inhibitory protein).	0	0

11	2	CDC2_154_169	GIPIRVYTHEVVT LWY	[]	[161, 166]	1000	P06493	Cell division control protein 2 homolog (EC 2.7.11.22) (EC 2.7.11.23) (p34 protein kinase) (Cyclin-dependent kinase 1) (CDK1).	0	0
11	3	ERF_519_531	GEAGGPLTPRRV S	[531]	[526]	1000	P50548	ETS domain-containing transcription factor ERF (Ets2 repressorfactor).	0	0
11	4	IF4E_203_215	TATKSGSTTKNR F	[207, 209]	[203, 205, 210, 211]	1000	P06730	Eukaryotic translation initiation factor 4E (eIF-4E) (eIF4E) (mRNA cap-binding protein) (eIF-4F 25 kDa subunit).	0	0
11	5	KPCB_626_639	AENFDRFFTRHP PV	[]	[634]	1000	P05771-2	Protein kinase C beta type (EC 2.7.11.13) (PKC-beta) (PKC-B).	0	0
11	6	MPIP1_172_184	FTQRQNSAPAR ML	[178]	[173]	1000	P30304	M-phase inducer phosphatase 1 (EC=3.1.3.48) (Dual specificity phosphatase Cdc25A).	0	0
11	7	PDE5A_95_107	GTPTRKISASEFD	[102, 104]	[96, 98]	1000	O76074	cGMP-specific 3',5'-cyclic phosphodiesterase (EC 3.1.4.35) (CGB-PDE)(cGMP-binding cGMP-specific phosphodiesterase).	0	0
11	8	RB_774_786	TRPPTLSPIHIP	[780]	[774, 778]	1000	P06400	Retinoblastoma-associated protein (PP110) (P105-RB) (RB).	0	0
11	9	VASP_150_162	EHIERRVSNAGG P	[157]	[]	1000	P50552	Vasodilator-stimulated phosphoprotein (VASP).	0	0
11	10	EPB42_241_253	LLNKRRGSVPILR	[248]	[]	200	P16452	Erythrocyte membrane protein band 4.2 (Erythrocyte protein 4.2)(P4.2).	0	0
11	11	PTN12_32_44	FMRLRRLSTKYR T	[39]	[40, 44]	200	Q05209	Tyrosine-protein phosphatase non-receptor type 12 (EC 3.1.3.48)(Protein-tyrosine phosphatase G1) (PTPG1) (PTP-PEST).	0	0
11	12	KCNA6_504_516	ANRERRPSYLPT P	[511]	[515]	200	P17658	Potassium voltage-gated channel subfamily A member 6 (Voltage-gatedpotassium channel subunit Kv1.6) (HBK2).	0	0
12	1	pVASP_150_164	EHIERRV(pS)NA GGPPA	[157]	[]	50	P50552	Vasodilator-stimulated phosphoprotein (VASP).	0	0
12	2	CDK7_163_175	GSPNRAYTHQV VT	[164]	[170, 175]	1000	P50613	Cell division protein kinase 7 (EC 2.7.11.22) (EC 2.7.11.23) (CDK-activating kinase) (CAK) (TFIIH basal transcription factor complexkinase subunit) (39 kDa protein kinase) (P39 Mo15) (STK1) (CAK1).	0	0
12	3	ESR1_160_172	GGRERLASTNDK G	[167]	[168]	1000	P03372	Estrogen receptor (ER) (Estradiol receptor) (ER-alpha) (Nuclearreceptor subfamily 3 group A member 1).	0	0

12	4	IKBA_26_38	LDDRHDSGLDS MK	[32, 36]	[]	1000	P25963	NF-kappa-B inhibitor alpha (I-kappa-B-alpha) (IkappaBalph) (Ikb-alpha) (Major histocompatibility complex enhancer-binding protein MAD3).	0	0
12	5	KS6A1_374_386	QLFRGFsfvatg L	[380]	[384]	1000	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) (pp90RSK1) (p90S6K) (Ribosomal S6 kinase 1) (RSK-1) (MAP kinase-activated protein kinase 1a) (MAPKAPK1A).	0	0
12	6	MPIP3_208_220	RSGLYRSPSMPE N	[209, 214, 216]	[]	1000	P30307	M-phase inducer phosphatase 3 (EC 3.1.3.48) (Dual specificityphosphatase Cdc25C).	0	0
12	7	PDPK1_27_39	SMVRTQTESSTP P	[27, 35, 36]	[31, 33, 37]	1000	O15530	3-phosphoinositide-dependent protein kinase 1 (EC 2.7.11.1) (hPDK1).	0	0
12	8	RB_803_815	NIYISPLKSPYKI	[807, 811]	[]	1000	P06400	Retinoblastoma-associated protein (PP110) (P105-RB) (RB).	0	0
12	9	VASP_232_244	GAKLRKVKQEE A	[239]	[]	1000	P50552	Vasodilator-stimulated phosphoprotein (VASP).	0	0
12	10	GBRB2_427_439	SRLRRRASQLKIT	[427, 434]	[439]	200	P47870	Gamma-aminobutyric acid receptor subunit beta-2 precursor (GABA(A)receptor subunit beta-2).	0	0
12	11	PYGL_8_20	QEKRQISIRGIV	[15]	[]	200	P06737	Glycogen phosphorylase, liver form (EC 2.4.1.1).	0	0
12	12	TY3H_65_77	FIGRRQLIEDAR	[71]	[]	200	P07101	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH).	0	0
11	5	CD70_9_21_C17S	SVRRRPYGSVLR A	[15]		1000	P32970	CD70 antigen, CD27 ligand , Tumor necrosis factor ligand superfamily member 7	0	0
11	6	CDK1_9_21	KIGEGTYGVVYK G	[15, 19]		1000	P06493	Cyclin-dependent kinase 1 (EC:2.7.11.22, EC:2.7.11.23), Cell division protein kinase 1, Cell division control protein 2 homolog, (p34 protein kinase)(CDK1)	0	0
11	7	CDK4_11_23	EIVGAYGTVYK A	[17, 21]		1000	P11802	Cyclin-dependent kinase 4 (EC:2.7.11.22) ,Cell division protein kinase 4 (PSK-J3)	0	0
11	8	ERBB3_1283_1295	PASEQGYEEMR AF	[1289]		1000	P21860	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	0	0

11	9	FYN_525_537	TATEPQYQPGEN L	[531]	1000	P06241	Tyrosine-protein kinase Fyn (EC:2.7.10.2), Proto-oncogene Syn, Proto-oncogene c-Fyn, Src-like kinase	0	0
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	0	0
11	11	GSK3B_210_222_C 218S	GEPNVSYISSRY	[216, 221, 222]	1000	P49841	Glycogen synthase kinase-3 beta (EC:2.7.11.26), Serine/threonine-protein kinase GSK3B (EC:2.7.11.1)	0	0
11	12	IRS2_626_638	HPYPEDYGDIEIG	[628, 632]	1000	Q9Y4H2	Insulin receptor substrate 2	0	0
11	13	JAK1_214_226	DISYKRYIPETLN	[217, 220]	1000	P23458	Tyrosine-protein kinase JAK1 (EC 2.7.10.2) (Janus kinase 1) (JAK-1).	0	0
11	14	JAK2_1001_1013	LPQDKKEYYKVE P	[1007, 1008]	1000	O60674	Tyrosine-protein kinase JAK2 (EC 2.7.10.2) (Janus kinase 2) (JAK-2).	0	0
12	1	JAK3_974_986	LPLDKDYVVVRE P	[980, 981]	1000	P52333	Tyrosine-protein kinase JAK3 (EC:2.7.10.2) (Janus kinase 3) (JAK-3).	0	0
12	2	KIT_930_942_C 942S	ESTNHIYSNLANS	[936]	1000	P10721	Mast/stem cell growth factor receptor Kit (EC:2.7.10.1), CD117	0	0
12	3	LYN_391_403	VIEDNEYTAREG A	[397]	1000	P07948	Tyrosine-protein kinase Lyn (EC:2.7.10.2)	0	0
12	4	LYN_501_512	YTATEGQYQQQ P	[501, 508]	1000	P07948	Tyrosine-protein kinase Lyn (EC:2.7.10.2)	0	0
12	5	MAPK3_198_210_C 203S	ALQTPSYTPYV A	[204, 207, 208]	1000	Q16644	MAP kinase-activated protein kinase 3 (EC:2.7.11.1)	0	0
12	6	MET_1228_1240	DMYDKEYYSVH NK	[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).	0	0
12	7	MET_1360_1370_C 1361S	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).	0	0
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).	0	0

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)(MAPK 3) (p44-MAPK) (ERT2)	0	0
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)	0	0
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 p38 gamma).	0	0
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).	0	0
12	13	PDCD1_221_229_F S219_220KK	KKVDYGELDFQ	[223]		1000	Q15116	Programmed cell death protein 1, (Protein PD-1) (CD279)	0	0
12	14	PECA1_708_718	DTETVYSEVRK	[713]		1000	P16284	Platelet endothelial cell adhesion molecule precursor (PECAM-1)(EndoCAM) (GPIIA') (CD31 antigen).	0	0
13	1	PLCG1_777_789	GRNPGFYVEANP M	[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).	0	0
13	2	PLCG2_1211_1223	NNQLFLYDTHQ NL	[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)	0	0
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).	0	0

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).	0	0
13	5	PTN6_531_541	GQESEYGNITY	[536, 541]	1000	P29350	Tyrosine-protein phosphatase non-receptor type 6 (EC:3.1.3.48)	0	0
13	6	PTN6_558_570	KHKEDVYENLHTK	[564]	1000	P29350	Tyrosine-protein phosphatase non-receptor type 6 (EC:3.1.3.48)	0	0
13	7	SHC1_309_321	ELRFKQYLRNPPK	[315]	1000	P29353	SHC-transforming protein 1	0	0
13	8	SRC_524_536	TSTEPQYQPGENL	[530]	1000	P12931	Proto-oncogene tyrosine-protein kinase Src (EC:2.7.10.2) (Proto-oncogene c-Src)(pp60c-src)(p60-Src)	0	0
13	9	STAT2_684_696	LQERRKYLKHRLI	[690]	1000	P52630	Signal transducer and activator of transcription 2 (p113)	0	0
13	10	TIE2_986_998	SRGQEVYVKKTMG	[992]	1000	Q02763	Angiopoietin-1 receptor (EC:2.7.10.1)	0	0
13	11	TYK2_1048_1060	VPEGHEYRVRE D	[1054, 1055]	1000	P29597	Non-receptor tyrosine-protein kinase TYK2 (EC:2.7.10.2)	0	0
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).	0	0
13	13	VISTA_260_270	RHPLSYVAQRQ	[265]	1000	Q9H7M9	V-type immunoglobulin domain-containing suppressor of T-cell activation	0	0
13	14	YES_420_432	LIEDNEYTARQGA	[426]	1000	P07947	Tyrosine-protein kinase Yes (EC:2.7.10.2)(Proto-oncogene c-Yes)(p61-Yes)	0	0
14	1	CD79A_181_193	EYEDENLYEGLNL	[182, 188]	1000	P11912	B-cell antigen receptor complex-associated protein alpha-chain precursor (Ig-alpha) (MB-1 membrane glycoprotein) (Surface IgM-associated protein) (Membrane-bound immunoglobulin-associated protein)(CD79a antigen).	0	0
14	2	CD3Z_77_89	LGRREEYDVLDKR	[83]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).	0	0
14	3	CD3Z_105_117	NPQEGLYNELQKD	[111]	1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).	0	0

14	4	CD3Z_117_129	DKMAEAYSEIG MK	[123]		1000	P20963	T-cell surface glycoprotein CD3 zeta chain precursor (T-cell receptorT3 zeta chain) (CD247 antigen).	0	0
14	5	MUSK_548_560	LHPNPMYQRMP LL	[554]		1000	O15146	Muscle, skeletal receptor tyrosine-protein kinase (EC:2.7.10.1)	0	0
14	6	ODBA_340_352_D 340K	KDSSAYRSVDEV N	[345]		1000	P12694	2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial (EC:1.2.4.4) (BCKDE1A)	0	0
14	7	GAB1_622_632	DKQVEYLDL	[627]		1000	Q13480	GRB2-associated-binding protein 1, GRB2-associated binder 1, Growth factor receptor bound protein 2-associated protein 1	0	0
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	0	0
14	9	IRS1_890_902	PKSPGEYVNIEFG	[896]		1000	P35568	Insulin receptor substrate 1	0	0
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).	0	0
14	11	MPZL1_236_246	QGPVIYAQLDH	[241]		1000	O95297	Myelin protein zero-like protein 1	0	0
14	12	PLCG2_1191_1203 _C12005	ESEEELYSSSRQL	[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)	0	0
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).	0	0
14	14	ENOG_37_49	SGASTGIYEALEL	[44]		1000	P09104	Gamma-enolase (EC 4.2.1.11) (2-phospho-D-glycerate hydro-lyase)(Neural enolase) (Neuron-specific enolase) (NSE) (Enolase 2).	0	0