



Appendix B

## KINETWORKS™ PHOSPHO-SITE BROAD COVERAGE PATHWAY SCREEN

### Catalog Number - KPSS 1.3

KPSS-1.3 tracks the following thirty-eight (38) phosphorylation sites in phosphoproteins with antibodies that recognize phosphorylated epitopes:

No.	Abbreviation	Full Name of Protein	Epitope(s)
1.	Adducin $\alpha$	Adducin alpha (ADD1)	S726
2.	Adducin $\gamma$	Adducin gamma (ADD3)	S693
3.	B23 [NPM]	B23 (nucleophosmin, numatrin, nucleolar protein NO38)	S4
4.	CDK1/2	Cyclin-dependent protein-serine kinase 1/2	Y15
5.	CREB1	cAMP response element binding protein 1	S133
6.	Erk1	Extracellular regulated protein-serine kinase 1 (p44 MAP kinase)	T202+Y204
7.	Erk2	Extracellular regulated protein-serine kinase 2 (p42 MAP kinase)	T185+Y187
8.	GSK3 $\alpha$	Glycogen synthase-serine kinase 3 alpha	S21
9.	GSK3 $\alpha$	Glycogen synthase-serine kinase 3 alpha	Y279
10.	GSK3 $\beta$	Glycogen synthase-serine kinase 3 beta	S9
11.	GSK3 $\beta$	Glycogen synthase-serine kinase 3 beta	Y216
12.	JNK	Jun N-terminus protein-serine kinase (stress-activated protein kinase (SAPK)) 1/2/3	T183+Y185
13.	Jun	Jun proto-oncogene-encoded AP1 transcription factor	S73
14.	MEK1/2 [MAP2K1/2]	MAPK/ERK protein-serine kinase 1/2 (MKK1/2)	S217+S221
15.	MEK3/6 [MAP2K3/6]	MAP kinase protein-serine kinase 3/6 (MKK3/6)	S189/S207
16.	MEK6 [MAP2K6]	MAP kinase protein-serine kinase 6 (MKK6)	S207
17.	Msk1	Mitogen- and stress-activated protein-serine kinase 1	S376
18.	NR1	N-methyl-D-aspartate (NMDA) glutamate receptor 1 subunit zeta	S896
19.	p38 $\alpha$ MAPK	Mitogen-activated protein-serine kinase p38 alpha	T180+Y182
20.	PKB $\alpha$ [Akt1]	Protein-serine kinase B alpha (Akt1)	T308
21.	PKB $\alpha$ [Akt1]	Protein-serine kinase B alpha (Akt1)	S473
22.	PKC $\alpha$	Protein-serine kinase C alpha	S657
23.	PKC $\alpha/\beta$ 2	Protein-serine kinase C alpha/beta 2	T638/T641
24.	PKC $\delta$	Protein-serine kinase C delta	T507
25.	PKC $\epsilon$	Protein-serine kinase C epsilon	S729
26.	PKR	Double-stranded RNA-dependent protein-serine kinase	T451
27.	Raf1	Raf 1 proto-oncogene-encoded protein-serine kinase	S259
28.	Rb	Retinoblastoma-associated protein	S780
29.	Rb	Retinoblastoma-associated protein	S807+S811
30.	RSK1/3	Ribosomal S6 protein-serine kinase 1/3	T359+S363/ T356+S360
31.	S6K2 p85	p85 ribosomal protein-serine S6 kinase 2	T412
32.	S6K $\alpha$ p70	p70 ribosomal protein-serine S6 kinase alpha	T389
33.	Smad1/5/9	SMA- and mothers against decapentaplegic homologs 1/5/9	S463+S465/S463+S465/S465+S467
34.	Src	Src proto-oncogene-encoded protein-tyrosine kinase	Y418
35.	Src	Src proto-oncogene-encoded protein-tyrosine kinase	Y529
36.	STAT1	Signal transducer and activator of transcription 1	Y701
37.	STAT3	Signal transducer and activator of transcription 3	S727
38.	STAT5	Signal transducer and activator of transcription 5	Y694

Y = tyrosine    S = serine    T = threonine


*Appendix C*
**KINETWORKS™ PHOSPHO-SITE CELL CYCLE STATUS SCREEN**
**Catalog Number - KPSS 10.1**

KPSS-10.1 tracks the following forty-four (44) phosphorylation sites in phosphoproteins with antibodies that recognize phosphorylated epitopes:

<b>No.</b>	<b>Abbreviation</b>	<b>Full Name of Protein</b>	<b>Epitope(s)</b>
1.	B23 [NPM]	B23 (nucleophosmin, numatrin, nucleolar protein NO38)	S4
2.	B23 [NPM]	B23 (nucleophosmin, numatrin, nucleolar protein NO38)	T199
3.	B23 [NPM]	B23 (nucleophosmin, numatrin, nucleolar protein NO38)	T234
4.	BRCA1	Breast cancer type 1 susceptibility protein	S1497
5.	CDK1/2	Cyclin-dependent protein-serine kinase 1/2	Y15
6.	CDK1/2	Cyclin-dependent protein-serine kinase 1/2	T14+Y15
7.	CDK1/2	Cyclin-dependent protein-serine kinase 1/2	T161/T160
8.	Erk1	Extracellular regulated protein-serine kinase 1 (p44 MAP kinase)	T202+Y204
9.	Erk2	Extracellular regulated protein-serine kinase 2 (p42 MAP kinase)	T185+Y187
10.	GSK3 $\alpha$	Glycogen synthase-serine kinase 3 alpha	S21
11.	GSK3 $\alpha$	Glycogen synthase-serine kinase 3 alpha	Y279
12.	GSK3 $\beta$	Glycogen synthase-serine kinase 3 beta	S9
13.	GSK3 $\beta$	Glycogen synthase-serine kinase 3 beta	Y216
14.	MEK1 [MAP2K1]	MAPK/ERK protein-serine kinase 1 (MKK1)	T291
15.	MEK1 [MAP2K1]	MAPK/ERK protein-serine kinase 1 (MKK1)	S297
16.	MEK1 [MAP2K1]	MAPK/ERK protein-serine kinase 1 (MKK1)	T385
17.	MEK1/2 [MAP2K1/2]	MAPK/ERK protein-serine kinase 1 (MKK1/2)	S217/S221
18.	MEK2 [MAP2K2]	MAPK/ERK protein-serine kinase 2 (MKK2) (human)	T394
19.	MEK2 [MAP2K2]	MAPK/ERK protein-serine kinase 2 (MKK2) (mouse)	T394
20.	mTOR	Mammalian target of rapamycin (FRAP)	S2448
21.	p27 Kip1	p27 cyclin-dependent kinase inhibitor 1B	T187
22.	p53	Tumor suppressor p53 (antigenNY-CO-13)	S392
23.	PDK1	3-Phosphoinositide-dependent protein-serine kinase 1	S244
24.	PKB $\alpha$ [Akt1]	Protein-serine kinase B alpha (Akt-1)	T308
25.	PKB $\alpha$ [Akt1]	Protein-serine kinase B alpha (Akt-1)	S473
26.	PTEN	Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase and protein phosphatase and tensin homolog deleted on chromosome 10	S380+S382+S385
27.	Raf1	Raf1 proto-oncogene-encoded protein-serine kinase	S259
28.	Rb	Retinoblastoma-associated protein 1	T356
29.	Rb	Retinoblastoma-associated protein 1	S612
30.	Rb	Retinoblastoma-associated protein 1	S780
31.	Rb	Retinoblastoma-associated protein 1	S807
32.	Rb	Retinoblastoma-associated protein 1	S807+S811
33.	Rb	Retinoblastoma-associated protein 1	T821
34.	Rb	Retinoblastoma-associated protein 1	T826
35.	RSK1/2	Ribosomal S6 protein-serine kinase 1/2	S221/S227
36.	RSK1/2	Ribosomal S6 protein-serine kinase 1/2	S363/S369
37.	RSK1/2	Ribosomal S6 protein-serine kinase 1/2	S380/S386
38.	S6	40S ribosomal protein S6	S235
39.	S6K $\alpha$ p85	p85 ribosomal protein-serine S6 kinase 2	T252
40.	S6K $\alpha$ p70	p70 ribosomal protein-serine S6 kinase-alpha	T229
41.	S6K $\alpha$ p85	p85 ribosomal protein-serine S6 kinase 2	T444/S447
42.	S6K $\alpha$ p70	p70 ribosomal protein-serine S6 kinase alpha	T421/S424
43.	Src	Src proto-oncogene-encoded protein-tyrosine kinase	Y418
44.	Src	Src proto-oncogene-encoded protein-tyrosine kinase	Y529

Y = tyrosine S = serine T = threonine



Appendix D

**KINETWORKS™ PHOSPHO-SITE PROTEIN KINASE SCREEN**  
**Catalog Number - KPSS 11.0**

KPSS-11.0 tracks the following thirty-seven (37) phosphorylation sites in phosphoproteins with antibodies that recognize phosphorylated epitopes:

<b>No.</b>	<b>Abbreviation</b>	<b>Full Name of Protein</b>	<b>Epitope(s)</b>
1.	EGFR	Epidermal growth factor receptor-tyrosine kinase	Y1148
2.	ErbB2	ErbB2(HER2,neu) receptor-tyrosine kinase	Y1248
3.	Erk1	Extracellular regulated protein-serine kinase 1 (p44 MAP kinase)	T202+Y204
4.	Erk2	Extracellular regulated protein-serine kinase 2 (p42 MAP kinase)	T185+Y187
5.	Erk5	Extracellular regulated protein-serine kinase 5 (Big MAP kinase 1 (BMK1))	T218+Y220
6.	FAK	Focal adhesion protein-tyrosine kinase	S910
7.	FAK	Focal adhesion protein-tyrosine kinase	Y397
8.	FAK	Focal adhesion protein-tyrosine kinase	S722
9.	FAK	Focal adhesion protein-tyrosine kinase	S843
10.	GRK2 [BARK1]	G protein-coupled receptor-serine kinase-2 (BARK1)	S670
11.	IR [INSR]	Insulin receptor	Y999
12.	IR/IGF1R [INSR/IGF1R]	Insulin receptor/Insulin like growth factor 1 receptor	Y1189/Y1190
13.	JNK	Jun N-terminus protein-serine kinases (stress-activated protein kinase (SAPK)) 1/2/3	T183/Y185
14.	Kit	Kit/Steel factor receptor-tyrosine kinase	Y703
15.	Lyn	Yes-related protein-tyrosine kinase	Y507
16.	p38 $\alpha$ MAPK	Mitogen-activated protein-serine kinase p38 alpha	T180+Y182
17.	PAK1/2/3	p21-activated serine kinase 1/2/3	S144/S141/S139
18.	PKA C $\alpha/\beta$	cAMP-dependent protein-serine kinase catalytic subunit alpha/beta	T197
19.	PKA C $\beta$	cAMP-dependent protein-serine kinase catalytic subunit beta	S338
20.	PKC $\alpha$	Protein-serine kinase C alpha	S657
21.	PKC $\alpha/\beta$ 2	Protein-serine kinase C alpha/beta 2	T638/T641
22.	PKC $\beta$ 1&2	Protein-serine kinase C beta 1/2	T500
23.	PKC $\beta$ 2	Protein-serine kinase C beta 2	T641
24.	PKC $\gamma$	Protein-serine kinase C gamma	T514
25.	PKC $\gamma$	Protein-serine kinase C gamma	T674
26.	PKC $\gamma$	Protein-serine kinase C gamma	T655
27.	PKC $\delta$	Protein-serine kinase C delta	S664
28.	PKC $\delta$	Protein-serine kinase C delta	Y313
29.	PKC $\epsilon$	Protein-serine kinase C epsilon	S729
30.	PKC $\zeta/\lambda$	Protein-serine kinase C zeta/lambda	T410/T403
31.	PKC $\eta$	Protein-serine kinase C eta	S674
32.	PKC $\mu$ (PKD)	Protein-serine kinase C mu (Protein Kinase D)	S738+S742
33.	PKC $\mu$ (PKD)	Protein-serine kinase C mu (Protein Kinase D)	S910
34.	PKR	Double stranded RNA dependent protein-serine kinase	T451
35.	PRK1 [PKN1]	Protein kinase C-related protein-serine kinase 1	T774
36.	PRK2 [PKN1]	Protein kinase C-related protein-serine kinase 2	T816
37.	Pyk2	Protein-tyrosine kinase 2	Y579

Y = tyrosine    S = serine    T = threonine



Appendix E

**KINETWORKS™ PHOSPHO-SITE SUBSTRATES OF KINASE SCREEN**  
**Catalog Number - KPSS 12.1**

KPSS-12.1 tracks the following forty (40) phosphorylation sites in phosphoproteins with antibodies that recognize phosphorylated epitopes:

<b>No.</b>	<b>Abbreviation</b>	<b>Full Name of Protein</b>	<b>Epitope(s)</b>
1.	4E-BP1	Eukaryotic translation initiation factor 4E binding protein 1 (PHAS1)	S65
2.	AcCoA Carboxylase	Acetyl coenzyme A carboxylase	S80
3.	Adducin $\alpha$	Adducin alpha (ADD1)	S726
4.	Adducin $\gamma$	Adducin gamma (ADD3)	S693
5.	ATF2	Activating transcription factor 2 (CRE-BP1)	T51+T53
6.	BLNK	B-cell linker	Y84
7.	Cofilin 1	Cofilin 1	S3
8.	Cortactin	Cortactin (amplaxin) (mouse)	Y470
9.	CREB1	cAMP response element binding protein 1	S133
10.	Dok2	Docking protein 2 (mouse)	Y139
11.	eIF2 $\alpha$	Eukaryotic translation initiation factor 2 alpha	S51
12.	eIF4E	Eukaryotic translation initiation factor 4 (mRNA cap binding protein)	S209
13.	eIF4 $\gamma$	Eukaryotic translation initiation factor 4 gamma, 1	S1107
14.	Erk1	Extracellular regulated protein-serine kinase 1 (p44 MAP kinase)	T202+Y204
15.	Erk2	Extracellular regulated protein-serine kinase 2 (p42 MAP kinase)	T185+Y187
16.	FKHRL1	Forkhead-like transcription factor (FOXO3A)	T32
17.	Hsp27	Heat shock 27 kDa protein beta 1 (HspB1)	S15
18.	Hsp27	Heat shock 27 kDa protein beta 1 (HspB1)	S78
19.	Hsp27	Heat shock 27 kDa protein beta 1 (HspB1)	S82
20.	Huntingtin	Huntington's disease protein	S421
21.	Jun	Jun proto-oncogene-encoded AP1 transcription factor	S73
22.	MARCKS	Myristoylated alanine-rich protein kinase C substrate	S158+S162
23.	NMDAR2B	N-methyl-D-aspartate (NMDA) glutamate receptor 2B subunit	Y1474
24.	NR1	N-methyl-D-aspartate (NMDA) glutamate receptor 1 subunit zeta	S896
25.	Paxillin 1	Paxillin 1	Y31
26.	Paxillin 1	Paxillin 1	Y118
27.	Pax2	Paired box protein 2	S394
28.	PRAS40	Proline-rich Akt substrate 40 kDa (Akt1S1)	T246
29.	Rac1/cdc42	Ras-related C3 botulinum toxin substrate 1	S71
30.	Rad 17	RAD17 homolog	S645
31.	Shc1	SH2 domain-containing transforming protein 1	Y349+Y350
32.	SOX9	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal)	S181
33.	STAT1	Signal transducer and activator of transcription 1	Y701
34.	STAT3	Signal transducer and activator of transcription 3	S727
35.	STAT3	Signal transducer and activator of transcription 3	Y705
36.	Synapsin 1	Synapsin 1 isoform Ia	S9
37.	Tau	Microtubule-associated protein tau	S515
38.	Tau	Microtubule-associated protein tau	S515/S518
39.	Tau	Microtubule-associated protein tau	T547
40.	Tau	Microtubule-associated protein tau	S712

Y = tyrosine    S = serine    T = threonine



*Appendix F*

**KINETWORKS™ PROTEIN KINASE SCREEN**  
**Catalog Number – KPKS 1.2**

*KPKS-1.2 tracks the expression levels of the following seventy-six (76) protein kinases:*

<b>No.</b>	<b>Abbreviation</b>	<b>Full Name of Protein</b>	<b>Type</b>
1.	Aurora 2 [AurB]	Aurora 2 (AurB, beta) protein-serine kinase	PSTK
2.	BMX (Etk)	Bone marrow X protein-tyrosine kinase	PSTK
3.	Btk	Bruton agammaglobulinemia tyrosine kinase	PYK
4.	CaMK1 $\delta$	Calcium/calmodulin-dep. protein-serine kinase 1 delta	PSTK
5.	CaMK4	Calmodulin-dependent protein-serine kinase 4	PSTK
6.	CaMKK [CaMKK2]	Calmodulin-dependent protein-serine kinase kinase	PSTK
7.	CDK1 [CDC2]	Cyclin-dependent protein-serine kinase 1	PSTK
8.	CDK2	Cyclin-dependent protein-serine kinase 2	PSTK
9.	CDK4	Cyclin-dependent protein-serine kinase 4	PSTK
10.	CDK5	Cyclin-dependent protein-serine kinase 5	PSTK
11.	CDK6	Cyclin-dependent protein-serine kinase 6	PSTK
12.	CDK7	Cyclin-dependent protein-serine kinase 7	PSTK
13.	CDK9	Cyclin-dependent protein-serine kinase 9	PSTK
14.	CK1 $\delta$	Casein protein-serine kinase 1 delta	PSTK
15.	CK1 $\epsilon$	Casein protein-serine kinase 1 epsilon	PSTK
16.	CK2 $\alpha$	Casein protein-serine kinase 2 alpha/ alpha prime	PSTK
17.	COT	Osaka thyroid oncogene protein-serine kinase (Tpl2)	PSTK
18.	Csk	C-terminus of Src tyrosine kinase	PYK
19.	DAPK1	Death-associated protein kinase 1	PSTK
20.	DNAPK	DNA-activated protein-serine kinase	PSTK
21.	eEF2K	Elongation factor-2 protein-serine kinase	PSTK
22.	Erk1	Extracellular regulated protein-serine kinase 1 (p44 MAP kinase)	PSTK
23.	Erk2	Extracellular regulated protein-serine kinase 2 (p42 MAP kinase)	PSTK
24.	Erk3	Extracellular regulated protein-serine kinase 3	PSTK
25.	Erk6 [p38 $\gamma$ ]	Mitogen-activated protein-serine kinase p38 gamma (MAPK12)	PSTK
26.	FAK	Focal adhesion protein-tyrosine kinase	PYK
27.	Fyn	Fyn proto-oncogene-encoded protein-tyrosine kinase	PYK
28.	GCK	Germinal centre protein-serine kinase	PSTK
29.	GRK2 [BARK1]	G protein-coupled receptor-serine kinase 2	PSTK
30.	GSK3 $\alpha$	Glycogen synthase-serine kinase 3 alpha	PSTK
31.	GSK3 $\beta$	Glycogen synthase-serine kinase 3 beta	PSTK
32.	HPK1	Hematopoietic progenitor protein-serine kinase 1	PSTK
33.	IKK $\alpha$	Inhibitor of NF-kappa-B protein-serine kinase alpha (CHUK)	PSTK
34.	IKK $\beta$	Inhibitor of NF-kappa-B protein-serine kinase beta	PSTK
35.	JAK1	Janus protein-tyrosine kinase 1	PYK
36.	JAK2	Janus protein-tyrosine kinase 2	PYK
37.	JNK	Jun N-terminus protein-serine kinases (stress-activated protein kinase (SAPK)) 1/2/3	PSTK
38.	Ksr1	Protein-serine kinase suppressor of Ras 1	PSTK
39.	Lck	Lymphocyte-specific protein-tyrosine kinase	PYK
40.	Lyn	Yes-related protein-tyrosine kinase	PYK


*Appendix F*
**KINETWORKS™ EXPRESSION LEVEL PROTEIN KINASE SCREEN CONTINUED**  
*Catalog Number – KPKS 1.2*

<b>No.</b>	<b>Abbreviation</b>	<b>Full Name of Protein</b>	<b>Type</b>
41.	MEK1 [MAP2K1]	MAPK/ERK protein-serine kinase 1 (MKK1)	PTYK
42.	MEK2 [MAP2K2]	MAPK/ERK protein-serine kinase 2 (MKK2)	PTYK
43.	MEK4 [MAP2K4]	MAP kinase protein-serine kinase 4 (MKK4)	PTYK
44.	MEK6 [MAP2K6]	MAP kinase protein-serine kinase 6 (MKK6)	PTYK
45.	Mnk2	MAP kinase-interacting protein-serine kinase 2 (calmodulin-activated)	PSTK
46.	Mos	Moloney sarcoma oncogene-encoded protein-serine kinase	PSTK
47.	MST1	Mammalian STE20-like protein-serine kinase 1	PYK
48.	p38 $\alpha$ MAPK	Mitogen-activated protein-serine kinase p38 alpha	PSTK
49.	PAK1	p21-activated serine kinase 1 (alpha)	PSTK
50.	PAK3	p21-activated serine kinase 3 (beta)	PSTK
51.	PDK1	3-phosphoinositide-dependent protein-serine kinase 1	PSTK
52.	PKA $C_{\alpha/\beta}$	cAMP-dependent protein-serine kinase catalytic subunit alpha/beta	PSTK
53.	PKB $\alpha$ [Akt1]	Protein-serine kinase B alpha	PSTK
54.	PKC $\alpha$	Protein-serine kinase C alpha	PSTK
55.	PKC $\beta$ 1	Protein-serine kinase C beta 1	PSTK
56.	PKC $\delta$	Protein-serine kinase C delta	PSTK
57.	PKC $\epsilon$	Protein-serine kinase C epsilon	PSTK
58.	PKC $\gamma$	Protein-serine kinase C gamma	PSTK
59.	PKC $\lambda$	Protein-serine kinase C lambda/iota	PSTK
60.	PKC $\tau$	Protein-serine kinase C theta	PSTK
61.	PKC $\zeta$	Protein-serine kinase C zeta	PSTK
62.	PKC $\mu$ [PKD]	Protein-serine kinase C mu (Protein kinase D)	PSTK
63.	PKG1	Protein-serine kinase G1 (cGMP-dependent protein kinase)	PSTK
64.	PKR1	Double stranded RNA dependent protein-serine kinase	PSTK
65.	Pyk2	Protein-tyrosine kinase 2	PYK
66.	Raf1	Raf1 proto-oncogene-encoded protein-serine kinase	PSTK
67.	RafB	RafB proto-oncogene-encoded protein-serine kinase	PSTK
68.	ROK $\alpha$	RhoA protein-serine kinase alpha (ROCK2)	PYK
69.	RSK1	Ribosomal S6 protein-serine kinase 1	PSTK
70.	RSK2	Ribosomal S6 protein-serine kinase 2	PSTK
71.	S6K $\alpha/\beta$	p70 ribosomal protein-serine S6 kinase alpha/beta	PSTK
72.	Src	Src proto-oncogene-encoded protein-tyrosine kinase	PYK
73.	Syk	Spleen protein-tyrosine kinase	PYK
74.	Yes	Yamaguchi sarcoma proto-oncogene-encoded tyrosine kinase	PYK
75.	ZAP70	Zeta-chain (TCR) associated protein-tyrosine kinase, 70 kDa	PYK
76.	ZIPK	ZIP kinase (death associated protein-serine kinase 3 (DAPK3))	PSTK

**LEGEND**

*PSTK = protein-serine/threonine kinase*

*PYK = protein-tyrosine kinase*

*PTYK = protein-threonine/tyrosine kinase*



Appendix G

**KINETWORKS™ PROTEIN PHOSPHATASE SCREEN**  
**Catalog Number – KPPS 1.2**

KPPS-1.2 tracks the expression levels of the following twenty-nine (29) protein phosphatases:

No.	Abbrev.	Full Name of Protein	Type
1.	CD45	Leukocyte common antigen CD45 receptor-tyrosine phosphatase (LCA, T200)	PYP
2.	Cdc25B	Cell division cycle 25B phosphatase	PSTYP
3.	Cdc25C	Cell division cycle 25C phosphatase	PSTYP
4.	KAP	Cyclin-dependent kinase associated phosphatase (CDK inhibitor 3, CIP2)	PSYP
5.	LAR	LCA antigen-related (LAR) receptor tyrosine phosphatase	PYP
6.	MKP1	MAP kinase phosphatase 1 (CL100, VH1)	PTYP
7.	MKP2	MAP kinase phosphatase 1 (VH2)	PTYP
8.	PAC1	Dual specificity MAP kinase protein phosphatase	PTYP
9.	PP1/C $\alpha$	Protein-serine phosphatase 1 - catalytic subunit - alpha isoform	PSTP
10.	PP1/C $\beta$	Protein-serine phosphatase 1 - catalytic subunit - beta isoform	PSTP
11.	PP1/C $\gamma$	Protein-serine phosphatase 1 - catalytic subunit - gamma isoform	PSTP
12.	PP2A/A $\alpha$ / $\beta$	Protein-serine phosphatase 2A - A regulatory subunit - alpha and beta isoforms	PSTP
13.	PP2A/C $\alpha$	Protein-serine phosphatase 2A - catalytic subunit alpha isoform	PSTP
14.	PP2A/C $\beta$	Protein-serine phosphatase 2A - catalytic subunit beta isoform	PSTP
15.	PP2B/A $\alpha$	Protein-serine phosphatase 2B - catalytic subunit - alpha isoform	PSTYP
16.	PP2C $\alpha$	Protein-serine phosphatase 2C - catalytic subunit - alpha isoform	PSTP
17.	PP2C $\beta$	Protein-serine phosphatase 2C - catalytic subunit - beta isoform	PSTP
18.	PP2C $\delta$	Protein-serine phosphatase 2C - catalytic subunit - delta isoform	PSTP
19.	PP4/A'2	Protein-serine phosphatase 4 - regulatory subunit (PPX/A'2)	PSTP
20.	PP4C	Protein-serine phosphatase X - catalytic subunit (PPX/C)	PSTP
21.	PP5C	Protein-serine phosphatase 5 - catalytic subunit (PPT)	PSTP
22.	PP6C	Protein-serine phosphatase 6 - catalytic subunit (PPVC)	PSTP
23.	PTEN	Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase and protein phosphatase and tensin homolog deleted on chromosome 10	PSTYP
24.	PTP1B	Protein-tyrosine phosphatase 1B	PYP
25.	PTP1C	Protein-tyrosine phosphatase 1C (SHP1, SHPTP1)	PYP
26.	PTP1D	Protein-tyrosine phosphatase 1D (SHP2, SHPTP2, Syp, PTP2C)	PYP
27.	PTP-PEST	Protein-tyrosine phosphatase with PEST sequences (PTPG1, PTPN12)	PYP
28.	SIRP $\alpha$ 1	Signal regulatory protein substrate of PTP1D phosphatase (SHPS1)	PYPsub
29.	VHR	Dual specificity protein phosphatase 3	PYP

**LEGEND**

*PSTP = protein-serine/threonine phosphatase*  
*PYP = protein-tyrosine phosphatase*  
*PTYP = protein-threonine/tyrosine phosphatase*  
*PSTYP = protein-serine/threonine/tyrosine phosphatase*  
*PTYsub = protein-tyrosine phosphatase substrate*