

Table S2. List of small sequences of short listed proteins using selection criteria # 2 (i.e. protein with known tyrosine phosphorylation site (**pY**) with proline at either -/+1 and/or -/+3 position (**P**) of a potential O-GlcNAc site (**S/T**) in the vicinity) showing known tyrosine phosphorylation site with potential O-GlcNAc site(s) in the vicinity.

Protein	pY site	Sequence
AnkyrinG	533	526 NAATTSG pY TP L HLSA 540
β-amyloid precursor protein	757	750 SKMQQNG pY EN P TYKF 764
β-amyloid precursor protein	762	755 NGYEN P T pY KFFEQMQ 769
Insulin receptor substrate 1	662	655 QRVD P NG pY MMMS P SG 669
Insulin receptor substrate 1	989	982 V P SSRGD pY MTMQMSC 996
Keratin 8	25	18 RAFSSRS pY TSG P GSR 32
Microtubule-associated Protein 1B	1062	1055 AGGAEQ pY GFLTT P T 1069
Microtubule-associated Protein 1B	1336	1329 GSAGHT P pY YQSP T DE 1343
Microtubule-associated Protein 1B	1796	1789 P RESS P L pY S P TFSDS 1803
Microtubule-associated Protein 1B	1830	1823 DAASAE P pY GFRA S VL 1837
Microtubule-associated Protein 1B	1921	1914 KS P SDSG pY S Y ETIGK 1928
Phosphatidylinositol kinase 3	425	418 K TIN P SK pY QTIRKAG 432
Rho GDP-dissociation inhibitor	144	137 VKIDKTD pY MG S Y P 151
Tubulin α	224	217 LDIER P T pY TNLNRLI 231
Tubulina α	357	350 GFKVGIN pY QP P TVVP 364
Annexin1	38	31 P GSAV S P pY PTFNP S 45
Annexin1	229	222 TILTTR S pY PQLRRVF 236
Dyenin	3377	3370 NYMSN P S pY NYEIVNR 3384
ATP-binding cassette, sub-family C	1508	1501 DKGEIQE pY GAPSDLL 1515
Heat-shock protein 70	41	34 GNRTT P S pY VAFDTE 48
Insulin receptor substrate 2	814	807 P RSYKAP pY TCGGDSD 821
Keratin 18	23	16 GSVQAP S pY GARPVSS 30
Nuclear factor-kappa B 105	59	52 QRGFRFR pY VCEGP S H 66
Piccolo	1824	1817 L P TAVSL pY S P TDEQS 1831
Phosphatidylinositol kinase 3	440	433 KTGERCL pY MW P SV P D 447
Ponsin	134	127 SSLAAKG pY RSVHPNL 141
RNA polymerase II	1860	1853 YT P TSPK pY S P TSPKY 1867
RNA polymerase II	1909	1902 YT P TSPK pY S P TSPTY 1916
RNA polymerase II	1923	1916 YS P TSPK pY S P TSPTY 1930
Vimentin	53	46 P STSRSL pY ASSPGGV 60
Prohibitin	114	107 FTSIGED pY DERVL P S 121
Prohibitin	259	252 SRSRNIT pY LPAQSV 266

Note: Above listed proteins are known to be O-GlcNAc modified however in majority of the cases O-GlcNAc modification sites are not known yet.