

**Table S1.** Detail information of the phosphopeptides enriched from tryptic digests of rat brain using  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>@SnO<sub>2</sub> nanotubes

Index	Peptide Sequence	MH+	DeltaM	Charge	Xcorr	DeltaCn	Ions	pI	MSn	Protein Description	Sp	RSp
	.LQAALDNEAGGRPA											
	MEPGNGS#LDL									IPI:IPI00210090.3		
1	GGDAAGR.	3060.38	-1.238	3	6.74	0.5	57/180	3.88	MS2&MS3	Gene_Symbol=Hnrnpu SP120	1976.4	1
	.TAKDS#DDDDDDVTV									IPI:IPI00324381.5		
2	TVDR.	1946.79	-0.367	2	6.73	0.1	38/48	3.52	MS2&MS3	Gene_Symbol=Stx1a Syntaxin-1A	1862.6	1
	.LLHEDLDES#DDD									IPI:IPI00365595.4		
3	DEK.	1966.78	-0.479	2	6.68	0.4	35/45	3.48	MS2&MS3	Gene_Symbol=Ddef2 development and differentiation enhancing factor 2	2420.7	1
	.TPEELDDSD#DFETED									IPI:IPI00358406.2		
4	FDVR.	2238.86	-1.386	2	6.64	0.2	37/51	3.19	MS2&MS3	Gene_Symbol=Ctnna1 Catenin (Cadherin-associated protein), alpha 1	1376.9	1
	.TPEELEDDSD#DFEQE									IPI:IPI00870129.1		
5	DYDVR.	2410.91	-0.437	2	6.16	0.4	37/54	3.16	MS2&MS3	Gene_Symbol=Ctnna2 catenin (cadherin associated protein), alpha 2	1413.6	1
	.FGIHVYQFPECDS#D									IPI:IPI00201737.1		
6	EDEDFKQQR.	3084.24	-0.216	3	6.04	0.3	49/138	3.82	MS2&MS3	Gene_Symbol=Sept5 Isoform 2 of Septin-5	907.3	1
	.GAEEEEEEEDDDSD#E									IPI:IPI00778976.1		
7	EEIK.	2190.76	-0.342	2	6.02	0.4	37/51	3.14	MS2&MS3	Gene_Symbol=Epb4.9 45 kDa protein	2054.0	1
	.NRDVEMGNS#VIEE									IPI:IPI00230956.1		
8	NEMK.	2073.86	-1.033	2	5.50	0.4	34/48	4.05	MS2&MS3	Gene_Symbol=Slc1a3 Isoform	946.6	1

	.LSSNCSGVEGDVT#									GLAST-1A of Excitatory amino acid transporter 1 IPI:IPI00870905.1 Gene_Symbol=Plcl2 phospholipase		
9	DEDEGAEMSQR.	2652.01	-1.281	2	5.26	0.3	37/69	3.35	MS2&MS3	C-like 2 IPI:IPI00358365.3 Gene_Symbol=Sgip1 similar to SH3-domain GRB2-like (endophilin) interacting protein 1	1133.6	1
	.TGS#PLTVATGNDQ									IPI:IPI00365935.3 Gene_Symbol=Ptges3 Prostaglandin E synthase 3		
10	AATEAK.	1911.87	-0.586	2	5.12	0.2	28/54	4.11	MS2&MS3	E synthase 3 IPI:IPI00331966.6 Gene_Symbol=Gabbr2 Gamma-aminobutyric acid type B receptor subunit 2 precursor	878.6	1
	.DWEDDS#DEDMSNF									IPI:IPI00471584.7 Gene_Symbol=Hsp90ab1 Heat shock protein HSP 90-beta	2399.9	1
11	DR.	1955.63	-0.758	2	5.03	0.4	34/42	3.18	MS2&MS3	IPI:IPI00360894.4 Gene_Symbol=Cadm4 Cell adhesion molecule 4 precursor	743.3	1
	.TCKDPIEDINS#PEHI									IPI:IPI00189138.1 Gene_Symbol=Nucks1 Nuclear ubiquitous casein and cyclin-dependent kinases substrate	1129.3	1
12	QR.	2131.95	-1.394	3	4.96	0.4	40/96	4.58	MS2&MS3			
	.IEDVGS#DEEDDSGK											
13	DK.	1817.70	-0.382	2	4.91	0.4	34/45	3.56	MS2&MS3			
	.GSYLTHEAS#GLDE											
14	QGEAR.	1999.84	-0.525	2	4.84	0.3	35/51	4.20	MS2&MS3			
	.KVVVDYSQFQES#DD											
15	ADEDYGR.	2445.97	-1.111	3	4.81	0.3	39/114	3.61	MS2&MS3		1026.8	1

	.KGAEDEEEEEEDDDDS									IPI:IPI00778976.1		
16	#EEEIK.	2318.86	-1.274	2	4.77	0.4	30/54	3.46	MS2&MS3	Gene_Symbol=Epb4.9 45 kDa protein	448.2	1
	.RGGGSGGGDES#EG									IPI:IPI00189358.2		
17	EEVDED.	1917.66	-0.285	2	4.68	0.3	34/54	3.30	MS2&MS3	Gene_Symbol=Purb Transcriptional activator protein Pur-beta	1198.6	1
	.WLDES#DAEMELR.									IPI:IPI00766722.1		
18	.WLDES#DAEMELR.	1573.62	-1.178	2	4.58	0.4	28/33	3.54	MS2&MS3	Gene_Symbol=LOC688570 similar to butyrate-induced transcript 1	1800.0	1
	.AKEEQELQDIQS#R.									IPI:IPI00206643.2		
19	.AKEEQELQDIQS#R.	1653.75	-1.155	3	4.51	0.2	31/72	4.21	MS2&MS3	Gene_Symbol=Gpm6b 36 kDa protein	1472.9	2
	.IQQFDDGGS#DEEDI									IPI:IPI00766645.2		
20	WEEK.	2219.87	-0.668	2	4.39	0.3	30/51	3.26	MS2&MS3	Gene_Symbol=Saps3 similar to SAPS domain family, member 3	717.5	1
	.KAEGEPQEES#PLKS									IPI:IPI00382244.1		
21	K.	1736.81	-1.224	3	4.30	0.2	41/84	4.78	MS2&MS3	Gene_Symbol=Bclaf1 Aa2-041	978.0	1
	.EDAPPEDKESESEA									IPI:IPI00208200.2		
22	KLDGET#ASDSESR.	2988.21	-0.808	3	4.25	0.2	50/156	3.72	MS2&MS3	Gene_Symbol=Cds2 Phosphatidate cytidyltransferase 2	821.5	2
	.DDEKEPEEGEDDRD									IPI:IPI00187860.3		
23	S#ANGEDDS.	2532.86	-0.840	3	4.21	0.4	39/126	3.33	MS2&MS3	Gene_Symbol=Hnrnpc Heterogeneous nuclear ribonucleoprotein C	753.3	1
	.KGAEDEEEEEEDDDDS									IPI:IPI00778976.1		
24	#EEEIK.	2318.86	-0.282	2	4.03	0.2	28/54	3.46	MS2&MS3	Gene_Symbol=Epb4.9 45 kDa	430.4	2

										protein		
										IPI:IPI00199693.2		
										Gene_Symbol=Mtap1a		
25	TGQR.	2120.97	-0.905	2	3.96	0.2	22/54	4.31	MS2&MS3	Microtubule-associated protein 1A	615.9	1
										IPI:IPI00204503.1		
										Gene_Symbol=Epb4.113 Type II		
26	TK.	1606.70	0.532	2	3.77	0.3	24/42	4.11	MS2&MS3	brain 4.1 minor isoform	858.8	1
										IPI:IPI00471640.1		
										Gene_Symbol=Leo1 RNA		
27	.KYVIS#DEEEEEEDD.	1679.62	-1.076	2	3.60	0.3	20/36	3.30	MS2&MS3	polymerase-associated protein LEO1	660.7	1
										IPI:IPI00778626.1		
28	S#PSSSETVR.	2657.13	-0.904	2	3.48	0.1	21/69	3.62	MS2&MS3	Gene_Symbol=Ania4 84 kDa protein	376.1	1
										IPI:IPI00208115.4		
										Gene_Symbol=Sv2a Synaptic vesicle		
29	.GGLS#DGEGPPGGR.	1235.51	-0.648	2	3.38	0.3	31/36	4.11	MS2&MS3	glycoprotein 2A	1148.2	1
										IPI:IPI00203530.5		
										Gene_Symbol=Cdh10 similar to		
30	A.	1522.58	-0.560	2	3.37	0.2	26/39	3.63	MS2&MS3	cadherin 10, type 2 preproprotein	789.4	1
										isoform 3		
										IPI:IPI00201213.3		
										Gene_Symbol=LOC501546		
31	R.	1577.61	-0.698	2	3.31	0.2	24/39	3.62	MS2&MS3	LOC501546 protein	560.4	1
										IPI:IPI00554111.2		
										Gene_Symbol=Ank2 similar to		
32	.ARS#YIETETESR.	1521.66	-0.459	2	3.19	0.2	22/33	4.60	MS2&MS3	ankyrin 2 isoform 1	381.4	1
33	.DSGSSSVFAES#PGG	1491.60	-0.563	2	3.17	0.3	29/42	4.11	MS2&MS3	IPI:IPI00190619.3	636.3	1

	K.									Gene_Symbol=Snip 135 kDa protein IPI:IPI00367933.4		
	.ARPSQLPEQSSSAQQ									Gene_Symbol=Kif2a Isoform 2 of Kinesin-like protein KIF2A	2308.9	1
34	NGSVSDIS#PVQAAK. .CGSGP VHISGQHLV AVEEDAES#EDEDEE	3047.44	-1.476	3	7.78	0.1	53/168	7.12	MS2	IPI:IPI00197553.1 Gene_Symbol=Npm1 Isoform B23.1 of Nucleophosmin	807.1	1
35	DVK. .TDSERTDTAADGET SATES#DQEEDAELK	3446.42	-1.340	3	7.30	0.4	49/180	3.71	MS2	IPI:IPI00204503.1 Gene_Symbol=Epb4.113 Type II brain 4.1 minor isoform	1189.1	2
36	.	3081.22	-1.151	3	7.06	0.1	48/162	3.45	MS2	IPI:IPI00204923.4 Gene_Symbol=Usp9x similar to Probable ubiquitin carboxyl-terminal hydrolase FAF-X (Ubiquitin thioesterase FAF-X) (Ubiquitin-specific-processing protease FAF-X) (	1240.3	1
37	.NGILAIEGTGSDVDD DMS#GDEKQDNESN VDPR.	3472.43	-1.592	3	6.98	0.1	52/186	3.41	MS2	IPI:IPI00213940.3 Gene_Symbol=Fam131b Protein FAM131B	1971.4	1
38	.KVS#DVTSSGVQSF DEEEGDANN. .GSAES#PDEGITTTE GEGECEQTPEELEPV	2393.96	-0.818	2	6.88	0.2	35/63	3.40	MS2	IPI:IPI00372009.3 Gene_Symbol=Map1b microtubule-associated protein 1b	1525.4	1
39	EK. .NLLEDDS#DEEEDFF LR.	3414.39	-1.655	3	6.41	0.1	51/180	3.28	MS2	IPI:IPI00358945.2 Gene_Symbol=Vamp4 16 kDa protein	3084.2	1
40		2065.83	-0.560	2	6.39	0.4	38/45	3.26	MS2			

	.VSEEAESQQWDTSK									IPI:IPI00373419.2		
	GDQVSQNGLPAEQG									Gene_Symbol=Spnb2		
41	S#PR.	3424.49	-1.388	3	6.25	0.4	56/180	3.86	MS2	Non-erythrocyte beta-spectrin	1569.8	1
	.EYVSN DAT#QSDDE									IPI:IPI00205633.8		
42	EKLQSQTDTDGGR.	3096.25	-1.561	3	6.07	0.1	47/156	3.56	MS2	Gene_Symbol=Wdr44 99 kDa protein	1340.5	2
	.KLSSNCSGVEGDVT									IPI:IPI00870905.1		
43	#DEDEGAEMSQR.	2780.10	-1.284	3	5.92	0.2	49/144	3.72	MS2	Gene_Symbol=Plcl2 phospholipase C-like 2	1365.7	1
	.KLPSESDLLEGEVT#									IPI:IPI00207181.1		
44	DEDEEAEMSR.	2788.18	-0.225	3	5.87	0.4	47/138	3.57	MS2	Gene_Symbol=Plcl1 Inactive phospholipase C-like protein 1	1330.6	1
	.AQKENS#MEEPEEM									IPI:IPI00190687.2		
	DSQDAETTNTTEPM									Gene_Symbol=Vcpip1		
45	DHS.	3491.31	-1.536	3	5.85	0.4	51/174	3.57	MS2	Deubiquitinating protein VCIP135	1520.7	1
	.DVMSDETNN EETES									IPI:IPI00372009.3		
46	#PSQEFVNITK.	2823.16	-0.469	3	5.78	0.1	52/138	3.41	MS2	Gene_Symbol=Map1b microtubule-associated protein 1b	2863.8	1
	.S#LDSDESEDEDDD									IPI:IPI00208277.1		
47	YQQK.	2097.73	-0.295	2	5.75	0.2	30/48	3.15	MS2	Gene_Symbol=Pdap1 28 kDa heat- and acid-stable phosphoprotein	813.6	1
	.DWEDDS#DEDMSNF									IPI:IPI00365935.3		
48	DR.	1955.63	-0.599	2	5.61	0.4	33/42	3.18	MS2	Gene_Symbol=Ptges3 Prostaglandin E synthase 3	2363.4	1
	.EEAS#DDDMEGDEA									IPI:IPI00373118.2		
49	VVR.	1846.67	0.118	2	5.58	0.3	33/45	3.26	MS2	Gene_Symbol=Ascc311 79 kDa protein	2175.8	1

	.GVVTNGLDVS#PAE									IPI:IPI00325609.4		
50	EK.	1594.74	-1.526	2	5.56	0.4	35/42	3.87	MS2	Gene_Symbol=Nefm Neurofilament medium polypeptide	2398.0	1
	.KGTGDCS#DEEVDG									IPI:IPI00209113.3		
51	KADGADAK.	2204.86	-1.149	3	5.44	0.1	41/120	3.89	MS2	Gene_Symbol=Myh9 Myosin-9	956.4	1
	.VVDYSQFQES#DDA									IPI:IPI00189138.1		
52	DEDYGR.	2317.88	-0.277	2	5.43	0.3	32/54	3.25	MS2	Gene_Symbol=Nucks1 Nuclear ubiquitous casein and cyclin-dependent kinases substrate	991.6	1
	.SKSDNSSHPQKDDG									IPI:IPI00189818.1		
	DNPET#IMSSGNVNS									Gene_Symbol=Edg1 Sphingosine 1-phosphate receptor Edg-1	437.4	15
53	SS.	3201.29	-0.433	3	5.42	0.2	44/174	4.16	MS2	IPI:IPI00192337.1		
	.AGAYDFPS#PEWDT									Gene_Symbol=Camk2a Calcium/calmodulin-dependent protein kinase type II alpha chain	1453.1	1
54	VTPEAK.	2160.92	-1.966	2	5.41	0.1	30/54	3.62	MS2	IPI:IPI00191730.1		
	.SAKDS#DDEEEVVH									Gene_Symbol=Stx1b Syntaxin-1B	1137.7	1
55	VDR.	1909.78	-0.965	3	5.38	0.2	42/90	3.94	MS2	IPI:IPI00209527.3		
	.SLAALDALNT#DDE									Gene_Symbol=Mfap1a similar to microfibrillar-associated protein 1	1112.2	1
56	NDEEEYEAWK.	2721.11	-1.631	2	5.37	0.2	32/66	3.23	MS2	IPI:IPI00764370.1		
	.AES#PETSVESTQS									Gene_Symbol=Pds5b PDS5, regulator of cohesion maintenance, homolog B isoform 1	1441.0	1
57	TPQK.	1956.84	-0.701	2	5.30	0.2	32/51	4.01	MS2			
58	.VDNSSLTGESEPQTR	3200.40	-0.942	3	5.23	0.1	45/162	3.86	MS2	IPI:IPI00326305.3	951.6	1

	S#PDFTNENPLETR.									Gene_Symbol=Atp1a1 Sodium/potassium-transporting ATPase subunit alpha-1 precursor IPI:IPI00779470.1		
	.KETES#EAEDDNL									Gene_Symbol=Srrm1 106 kDa protein IPI:IPI00870224.1		
59	DLER.	2087.83	-0.005	2	5.17	0.1	28/48	3.56	MS2		479.8	1
	.GDMS#DEDDENEFF									Gene_Symbol=Osbp oxysterol binding protein IPI:IPI00565773.1		
60	DAPEIITMPENLGHK. .VARPQILEPRPQS#P	3275.31	-1.316	3	5.15	0.4	40/162	3.48	MS2		816.0	1
61	DLCDDVVEFR.	2932.37	-0.861	3	5.13	0.5	52/138	4.04	MS2	Gene_Symbol=Sept4 55 kDa protein IPI:IPI00417225.1	1390.7	1
	.VAS#EEEEVPLVY									Gene_Symbol=Synpo Isoform 1 of Synaptopodin IPI:IPI00365929.1		
62	LK.	1783.88	-0.915	2	5.08	0.5	30/42	3.84	MS2		1479.9	1
	.DGELPVEDDIDLS#D									Gene_Symbol=Pdia6 protein disulfide isomerase associated 6 IPI:IPI00476991.1		
63	VELDDLEKDEL.	2910.26	-1.500	2	4.99	0.5	30/72	3.01	MS2		1003.1	1
	.AAFSDDES#KEPIVE									Gene_Symbol=Ncam1 Neural cell adhesion molecule 1, 140 kDa isoform precursor IPI:IPI00188804.1		
64	VR.	1884.91	0.127	2	4.96	0.2	27/45	4.70	MS2		346.2	1
	.KEESEES#DDDMGF									Gene_Symbol=Rplp2 60S acidic ribosomal protein P2 IPI:IPI00373419.2		
65	GLFD. .GDQVSQNGLPAEQG	2029.73	-0.035	2	4.88	0.1	29/48	3.25	MS2		1181.8	1
66	S#PR.	1819.80	-1.279	2	4.87	0.3	27/48	4.11	MS2	Gene_Symbol=Spnb2	547.2	1



										Non-erythrocyte beta-spectrin IPI:IPI00189138.1 Gene_Symbol=Nucks1 Nuclear ubiquitous casein and cyclin-dependent kinases substrate	1122.8	1
67	.TPSPKEEDEEAES#P PEKK.	2106.91	-1.006	3	4.85	0.4	46/102	4.12	MS2	IPI:IPI00324381.5		
68	.TAKDS#DDDDVTV TVDRDR.	2217.91	0.049	3	4.81	0.2	43/108	3.69	MS2	Gene_Symbol=Stx1a Syntaxin-1A IPI:IPI00209590.2	1158.2	1
69	.LTSIGS#DEDEETET YQEK.	2153.86	-1.577	2	4.77	0.1	28/51	3.41	MS2	Gene_Symbol=Slc12a6 solute carrier family 12, member 6 IPI:IPI00208277.1	699.5	1
70	.SLDSDES#EDED YQK.	2097.73	-0.351	2	4.67	0.5	28/48	3.15	MS2	Gene_Symbol=Pdap1 28 kDa heat- and acid-stable phosphoprotein IPI:IPI00324893.4	620.7	2
71	.TAFDEAIAELDTLS# EESYK.	2211.96	-1.181	2	4.67	0.1	28/54	3.47	MS2	Gene_Symbol=Ywhaz 14-3-3 protein zeta/delta IPI:IPI00476178.3	1218.9	1
72	.ESLKEEDS#DDDN M.	1735.59	-0.575	2	4.59	0.4	24/39	3.25	MS2	Gene_Symbol=Psma31;Psma3 Proteasome subunit alpha type-3 IPI:IPI00206643.2	444.2	1
73	.AKEEQELQDIQS#R. .	1653.75	-0.689	3	4.55	0.2	34/72	4.21	MS2	Gene_Symbol=Gpm6b 36 kDa protein IPI:IPI00210635.2	1828.8	1
74	.FLALMREEGAS#PL DFD.	1890.83	-0.687	2	4.52	0.4	32/45	3.62	MS2	Gene_Symbol=Nsf Vesicle-fusing ATPase	1695.1	1
75	.LENEGS#DEDIETDV .	2676.16	-1.008	2	4.36	0.4	27/66	3.35	MS2	IPI:IPI00208152.2	893.3	1

	LYSPQMALK.									Gene_Symbol=Mgea5 Isoform 1 of Bifunctional protein NCOAT IPI:IPI00778976.1		
	.KGAEIIIIIIIIEDDSDS									Gene_Symbol=Epb4.9 45 kDa protein IPI:IPI00392493.3		
76	#EEEIK.	2318.86	-1.420	3	4.34	0.3	39/108	3.46	MS2		1399.3	1
	.NCPS#PMQTGAATD									Gene_Symbol=Elav14 similar to ELAV-like 4 isoform 5 IPI:IPI00876619.1		
77	DSK.	1759.67	-0.294	2	4.34	0.1	28/45	3.92	MS2		985.8	1
	.FKTQPVTDFDEIQEVE									Gene_Symbol=RGD1564664 Protein Ag2 IPI:IPI00208699.1		
78	EEGVS#PMEEEK.	3134.38	-1.255	3	4.32	0.3	35/150	3.71	MS2		384.0	1
	.DQNLQPQILEESRS#E.									Gene_Symbol=Cntnap1 Contactin-associated protein 1 precursor IPI:IPI00558210.3 Gene_Symbol=-similar to transcription elongation factor A (SII)-like 5 IPI:IPI00207657.1		
79	.DQNLQPQILEESRS#E.	1737.77	-0.699	2	4.32	0.1	27/39	3.72	MS2		1243.2	1
	.GTDDDS#PKNSQEDL									Gene_Symbol=Usp5 ubiquitin specific peptidase 5 IPI:IPI00202703.4		
80	QDR.	1884.76	0.693	3	4.31	0.1	45/90	3.80	MS2		1691.5	1
	.GTGLQPGEELPDIA									Gene_Symbol=Ostf1 Osteoclast-stimulating factor 1 IPI:IPI00188804.1		
81	PPLVT#PDEPK.	2679.28	-0.806	2	4.30	0.5	26/72	3.47	MS2		956.1	1
	.TLSNAEDYLDDSDS									Gene_Symbol=Rplp2 60S acidic		
82	#D.	1781.63	-0.917	2	4.30	0.3	25/42	2.56	MS2		963.7	1
	.KEES#EESDDDMGF											
83	GLFD.	2029.73	-0.344	2	4.27	0.1	27/48	3.25	MS2		1044.5	1

	.ESDDKPEIEDVGS#D									ribosomal protein P2		
										IPI:IPI00210566.3		
										Gene_Symbol=Hsp90aa1 Heat shock		
84	EEEEEEK.	2516.01	-1.636	3	4.27	0.4	44/120	3.68	MS2	protein HSP 90-alpha	1078.6	1
										IPI:IPI00325912.1		
	.RTS#MGGTQQQFVE									Gene_Symbol=Ctnnb1 Catenin		
85	GVR.	1860.84	-0.951	2	4.27	0.1	21/45	10.60	MS2	beta-1	185.6	16
	.AEAKEESEES#DED									IPI:IPI00561389.2 Gene_Symbol=-		
86	MGFGLFD.	2314.86	-0.814	2	4.24	0.3	32/57	3.26	MS2	32 kDa protein	1047.2	1
	.IYHLPDAES#DEDED									IPI:IPI00208304.1		
87	FKEQTR.	2517.05	-1.226	3	4.23	0.4	42/114	3.87	MS2	Gene_Symbol=Sept2 Septin-2	872.7	1
										IPI:IPI00213940.3		
	.KVSDVTSSGVQS#F									Gene_Symbol=Fam131b Protein		
88	DEEEGDANN.	2393.96	-0.265	2	4.21	0.1	27/63	3.40	MS2	FAM131B	628.1	1
	.GS#SQPNLSTSYSEQ									IPI:IPI00209348.2		
89	EYGK.	2041.84	-0.534	2	4.18	0.4	25/51	4.31	MS2	Gene_Symbol=Epn2 Epsin-2	770.7	1
										IPI:IPI00325912.1		
	.RTS#MGGTQQQFVE									Gene_Symbol=Ctnnb1 Catenin		
90	GVR.	1860.84	-1.051	2	4.17	0.1	25/45	10.60	MS2	beta-1	323.9	1
										IPI:IPI00331966.6		
	.TCKDPIEDINS#PEHI									Gene_Symbol=Gabbr2		
91	QR.	2131.95	-1.260	3	4.17	0.3	36/96	4.58	MS2	Gamma-aminobutyric acid type B receptor subunit 2 precursor	543.3	2
	.MNVPETMNEVLDM											
	S#DDEGEDAITGDTD									IPI:IPI00389129.3		
92	K.	3151.23	-1.631	3	4.07	0.2	40/162	3.12	MS2	Gene_Symbol=Ank3 Ankyrin G197	630.8	1

	.GSLPPAALES#SDST									IPI:IPI00326171.2		
										Gene_Symbol=Camk2b		
										calcium/calmodulin-dependent		
										protein kinase II beta subunit isoform		
93	NTTIEDEDAK.	2528.09	-0.347	2	4.07	0.1	22/69	3.40	MS2	1	304.4	4
	.IEDVGS#DEEDDSGK									IPI:IPI00471584.7		
										Gene_Symbol=Hsp90ab1 Heat shock		
										protein HSP 90-beta	883.9	2
94	DKK.	1945.79	-1.335	3	4.06	0.2	37/96	3.82	MS2			
	.KPGNNEGSGAPS#PL									IPI:IPI00215134.1		
										Gene_Symbol=Snap91 Isoform Long		
										of Clathrin coat assembly protein		
95	SK.	1619.74	-1.471	2	4.03	0.2	27/45	9.57	MS2	AP180	481.2	1
	.GSLPPAALESS#DST									IPI:IPI00326171.2		
										Gene_Symbol=Camk2b		
										calcium/calmodulin-dependent		
										protein kinase II beta subunit isoform		
96	NTTIEDEDAK.	2528.09	0.220	2	4.03	0.1	25/69	3.40	MS2	1	494.9	5
	.GDEDFQS#DSDSFNP									IPI:IPI00189777.5		
										Gene_Symbol=Lrrc7 Isoform 1 of		
										Leucine-rich repeat-containing		
97	TLWEEQR.	2582.00	-1.917	2	4.02	0.2	25/60	3.30	MS2	protein 7	496.8	1
	.KFQEQECPPS#PEPT									IPI:IPI00190290.1		
										Gene_Symbol=Rras2 Related RAS		
										viral (R-ras) oncogene homolog 2	485.1	1
98	RK.	2037.91	-1.327	3	3.96	0.2	39/90	6.50	MS2			
	.REDS#PGPEVQPM									IPI:IPI00196677.1		
										Gene_Symbol=Trim3 Tripartite	762.9	1
99	K.	1664.70	0.267	2	3.91	0.3	25/39	4.11	MS2			

	.QQISELERQKQDLES										motif-containing protein 3 IPI:IPI00370405.4		
100	#R.	2066.99	-1.256	2	3.89	0.2	25/45	4.70	MS2	Gene_Symbol=Myo5c myosin VC IPI:IPI00210881.1	1637.2	1	
	.APEGEETEFYVS#PE									Gene_Symbol=Dnajc5 DnaJ homolog subfamily C member 5 IPI:IPI00766645.2	291.2	1	
101	DLEAQLQSDER.	2948.24	-0.592	2	3.85	0.2	19/72	3.32	MS2	Gene_Symbol=Saps3 similar to SAPS domain family, member 3 IPI:IPI00212320.1	424.8	2	
	.IQQFDDGGS#DEEDI									Gene_Symbol=Gap43 Neuromodulin IPI:IPI00359851.3	609.8	6	
102	WEEK.	2219.87	0.548	2	3.83	0.3	25/51	3.26	MS2	Gene_Symbol=Jph3 junctophilin 3 IPI:IPI00193828.1	597.9	1	
	.ATT#DNSPSSKAED									Gene_Symbol=Fxyd1 Phospholemman precursor IPI:IPI00373419.2	371.6	1	
103	GPAKEEPK.	2238.98	-0.897	3	3.82	0.2	38/120	4.33	MS2	Gene_Symbol=Spnb2 Non-erythrocyte beta-spectrin IPI:IPI00372009.3	243.7	6	
	.SLPVALES#DEETGD									Gene_Symbol=Map1b microtubule-associated protein 1b IPI:IPI00476991.1	589.8	1	
104	ELK.	1911.85	-0.969	2	3.81	0.2	22/48	3.47	MS2	Gene_Symbol=Ncam1 Neural cell adhesion molecule 1, 140 kDa isoform precursor	290.9	2	
	.TGEPDEEEGTFRSS#I												
105	R.	1889.79	-1.708	2	3.81	0.1	28/45	4.05	MS2				
	.GDQVSQNGLPAEQG												
106	S#PR.	1819.80	-1.281	2	3.79	0.3	20/48	4.11	MS2				
	.VQSLEGEKLS#PK.												
107	.	1394.69	-1.590	2	3.79	0.3	24/33	7.09	MS2				
	.AAFS#KDESKEPIVE												
108	VR.	1884.91	0.086	2	3.77	0.4	25/45	4.70	MS2				

	.NPPQDYES#DDESY									IPI:IPI00370695.2		
109	EVLDLTEYAR.	2925.20	-0.679	2	3.75	0.1	24/69	3.26	MS2	Gene_Symbol=Fundc1 FUN14	407.5	1
	.EQQEQLS#FQQTPID									IPI:IPI00202684.1		
110	R.	1926.86	-1.264	2	3.74	0.1	18/42	3.87	MS2	Gene_Symbol=Tank TANK protein	296.3	112
	.SSSS#SSGVGSPAV									IPI:IPI00187782.2		
111	TPTEK.	1831.80	-0.357	2	3.65	0.1	24/54	6.74	MS2	Gene_Symbol=Srgap3 similar to SLIT-ROBO Rho GTPase-activating protein 3	1039.5	2
	.LDKDGIPVSS#EAER									IPI:IPI00569865.1		
112	.	1595.73	-1.574	2	3.61	0.1	23/39	4.11	MS2	Gene_Symbol=Ergic3 44 kDa protein	1058.2	1
	.T#AKDSDDDDDDVTV									IPI:IPI00324381.5		
113	TVDRDR.	2217.91	-0.355	2	3.61	0.4	30/54	3.69	MS2	Gene_Symbol=Stx1a Syntaxin-1A	558.7	2
	.TSFSVGS#DDELGPI									IPI:IPI00198211.2		
114	R.	1659.73	-0.316	2	3.59	0.2	26/42	3.74	MS2	Gene_Symbol=Grlf1 Glucocorticoid receptor DNA-binding factor 1	975.9	1
	.ASAAEGSEAS#PPSL									IPI:IPI00358407.1		
115	R.	1509.66	-0.394	2	3.58	0.2	27/42	4.31	MS2	Gene_Symbol=Kbtbd11 kelch repeat and BTB (POZ) domain containing 11	979.7	1
	.AGEQQLS#EPEDME									IPI:IPI00372303.3		
116	MEAGDTDDPPR.	2727.04	-1.026	2	3.55	0.4	27/69	3.23	MS2	Gene_Symbol=Usp7 Ubiquitin carboxyl-terminal hydrolase 7	404.4	1
	.TASLTSAAAS#IDGSR.									IPI:IPI00326606.4		
117	.	1416.64	-0.085	2	3.54	0.1	27/39	6.50	MS2	Gene_Symbol=Ndr2 Isoform 2 of Protein NDRG2	1232.8	1

	.DSGSDEDFLMEDDD									IPI:IPI00189138.1		
										Gene_Symbol=Nucks1 Nuclear		
										ubiquitous casein and		
118	DS#DYGSSK.	2508.84	-0.003	2	3.54	0.2	24/63	3.06	MS2	cyclin-dependent kinases substrate	442.5	1
										DECOY_IPI:IPI00567584.2		
										Gene_Symbol=LOC501388 similar		
119	.LEVRKS#IQLELIK.	1648.94	-1.476	2	3.49	0.1	23/36	9.89	MS2	to Protein C9orf79	292.1	6
										IPI:IPI00193828.1		
	.TGEPDEEEGTFRSS#I									Gene_Symbol=Fxyd1		
120	R.	1889.79	-0.604	2	3.47	0.1	26/45	4.05	MS2	Phospholemman precursor	422.4	2
										IPI:IPI00365435.4		
	.NTPQLWSVPS#ELL									Gene_Symbol=LOC683446 38 kDa		
121	K.	1691.84	-1.454	2	3.47	0.1	17/39	6.55	MS2	protein	198.0	87
										IPI:IPI00372009.3		
	.TTRS#PDTSAYCYET									Gene_Symbol=Map1b		
122	MEK.	2119.83	-1.903	2	3.43	0.1	25/48	4.49	MS2	microtubule-associated protein 1b	330.2	1
										IPI:IPI00203725.2		
	.KLEKEEEEGISQES#									Gene_Symbol=Hmga1 Isoform		
123	SEEEQ.	2316.96	-0.283	2	3.40	0.1	27/54	3.76	MS2	HMG-I of High mobility group		
										protein HMG-I/HMG-Y	307.1	1
										IPI:IPI00358275.3		
	.SHS#SPSLNPDASPV									Gene_Symbol=Psd3 similar to		
124	TAK.	1774.80	-0.022	2	3.40	0.1	22/48	7.59	MS2	Pleckstrin and Sec7 domain		
										containing protein 3	311.0	2
	.TIKS#PCDSGYSETI									IPI:IPI00372009.3		
125	EK.	2057.88	-0.548	2	3.39	0.2	19/48	4.49	MS2	Gene_Symbol=Map1b	254.6	17

										microtubule-associated protein 1b		
	.IYQFPDCDS#DEDED									IPI:IPI00421642.1		
126	FK.	2102.76	-0.591	2	3.31	0.2	24/45	3.25	MS2	Gene_Symbol=Sept4 Septin	575.2	1
	.T#PGPLSSQGAPVDT									IPI:IPI00210153.3		
127	QPAAQK.	2029.96	-0.533	2	3.29	0.3	21/57	6.50	MS2	Gene_Symbol=Synj1 similar to Synaptojanin-1	412.6	2
	.KEES#EESDDDM*G									IPI:IPI00188804.1		
128	FGLFD.	2045.72	-1.725	2	3.29	0.2	18/48	3.25	MS2	Gene_Symbol=Rplp2 60S acidic ribosomal protein P2	438.7	3
	.DTDAYSDLS#DGEK									IPI:IPI00213940.3		
129	EAR.	1851.73	-0.546	2	3.28	0.2	25/45	3.73	MS2	Gene_Symbol=Fam131b Protein FAM131B	333.7	1
	.TGEPDEEEGTFRS#SI									IPI:IPI00193828.1		
130	R.	1889.79	-0.534	2	3.27	0.2	26/45	4.05	MS2	Gene_Symbol=Fxyd1 Phospholemman precursor	334.0	3
	.SAS#ADNLILPR.									IPI:IPI00364913.2		
131	.VDPSLMEDS#DDGP	1236.60	-0.521	2	3.25	0.1	23/30	6.55	MS2	Gene_Symbol=Ccny similar to cyclin fold protein 1	1124.5	3
132	SLPTK.	1982.83	0.422	2	3.23	0.2	24/51	3.39	MS2	IPI:IPI00202231.1 Gene_Symbol=Rer1 Protein RER1	796.4	1
	.AIS#LEGEPR.									IPI:IPI00327448.1		
133	.FLLQHQADVNAKT#	1051.48	-0.769	2	3.22	0.3	20/24	4.31	MS2	Gene_Symbol=Dlg2 Isoform 1 of Disks large homolog 2	788.2	2
134	K.	1692.85	-0.857	2	3.22	0.1	19/39	9.67	MS2	IPI:IPI00767980.2 Gene_Symbol=Ank1 ankyrin 1, erythroid	205.3	121



135	R.	.SGYSSPGS#PGTPGS	1473.60	0.048	2	3.17	0.1	20/42	9.65	MS2	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	523.4	1
136	K.	.DSGSSSVFAES#PGG	1491.60	-0.585	2	3.15	0.1	28/42	4.11	MS2	IPI:IPI00190619.3 Gene_Symbol=Snip 135 kDa protein DECOY_IPI:IPI00364960.1 Gene_Symbol=Kif20a	677.8	1
137	.	.EQIQEQY#FTTLSEK.	1823.81	-1.337	2	3.12	0.2	18/39	4.01	MS2	Kif20a_predicted protein IPI:IPI00203158.3 Gene_Symbol=Stub1 STIP1 homology and U-Box containing	222.2	42
138	AQELK.	.LGTGGGGS#PDKSPS	1865.86	-1.513	2	3.11	0.4	23/54	7.01	MS2	protein 1 IPI:IPI00209824.2 Gene_Symbol=Camk2b Calmodulin-dependent protein kinase	168.3	12
139	AK.	.ESSDST#NTTIEDED	1821.69	0.113	2	3.08	0.2	21/45	3.40	MS2	II beta M isoform	453.3	4

# Phosphorylation Site