

Table S1. Detail information of the phosphopeptides enriched from tryptic digests of rat brain using zirconium phosphate-modified magnetic mesoporous microspheres.

Index	Peptide Sequence	MH+	DeltaM	Charge	Xcorr	DeltaCn	Ions	pI	MSn	Protein Description	Sp	RSp
1	.FTGYQTIQQSSSE TEGEGGNTADAS*S *EEEGDRVEDGK.	4183.64	-1.206	3	8.79	0.2	61/296	3.57	MS2&MS3	IPI:IPI00204130.1 Gene_Symbol=Hdgfrp3 Hepatoma-derived growth factor-related protein 3	759	1
2	.FTGYQTIQQSS*S ETEGEGGNTADAS* S*EEEGDRVEDGK.	4263.61	-1.412	3	7.68	0.1	67/370	3.57	MS2&MS3	IPI:IPI00204130.1 Gene_Symbol=Hdgfrp3 Hepatoma-derived growth factor-related protein 3	698	1
3	.TPEELEDDS*DFEQ EDYDVR.	2410.91	-1.220	2	7.41	0.4	35/54	3.16	MS2&MS3	IPI:IPI00870129.1 Gene_Symbol=Ctnna2 catenin (cadherin associated protein), alpha 2	1280	1
4	.IEKLPS*ISDLDSIFG PVLS*PK.	2415.19	-1.883	2	7.16	0.1	47/80	4.35	MS2&MS3	IPI:IPI00358365.3 Gene_Symbol=Sgip1 similar to SH3-domain GRB2-like (endophilin) interacting protein 1	1016	1
5	.ASRVPS*S*DEEVV EEPQSR.	2160.88	-0.476	2	6.54	0.3	42/68	4.05	MS2&MS3	IPI:IPI00372789.3 Gene_Symbol=tnks1bp1 similar to tankyrase 1-binding protein of 182 kDa	927	1

6	.TAKDS*DDDDVTVDR.	1946.79	-0.603	2	6.40	0.1	32/48	3.52	MS2&MS3	IPI:IPI00324381.5 Gene_Symbol=Stx1a Syntaxin-1A	1179	1
7	.FIDKDQQPS*GS*EGEDDDAEAAALKK.	2753.12	-1.671	3	6.38	0.5	55/184	3.82	MS2&MS3	IPI:IPI00359917.1 Gene_Symbol=Thumpd1 THUMP domain containing 1	439	1
8	.T*DDVSEKT*S*LA DQEEVR.	2161.80	-0.696	2	6.31	0.2	40/80	3.79	MS2&MS3	IPI:IPI00193361.5 Gene_Symbol=Atp8a1 similar to ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	612	2
9	.T*ADS*S*S*SEDEE EYVVEK.	2223.66	-0.642	2	6.25	0.4	42/96	3.41	MS2&MS3	IPI:IPI00214953.3 Gene_Symbol=Cbx5 Chromobox homolog 5 (Drosophila HP1a) (Predicted), isoform CRA_a	947	5
10	.S*LSDSES*EDED DYQQK.	2177.70	-0.381	2	6.15	0.3	43/64	3.15	MS2&MS3	IPI:IPI00208277.1 Gene_Symbol=Pdap1 28 kDa heat- and acid-stable phosphoprotein	1507	1
11	.AKTDHGAEIVYKS *PVVS*GDT*SPR.	2654.13	-0.977	3	6.14	0.1	67/220	7.79	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated	718	2

										protein tau		
12	.AEGYEKTDDVS*E KT*S*LADQEEVR.	2839.10	-1.752	3	6.12	0.2	65/220	3.92	MS2&MS3	IPI:IPI00193361.5 Gene_Symbol=Atp8a1 similar to ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	813	1
13	.TY*ETPPPS*PGLDP TFSNQPVPDAVR.	2939.29	-1.309	3	6.12	0.1	58/200	3.74	MS2&MS3	IPI:IPI00372934.3 Gene_Symbol=Mpp2 similar to MAGUK p55 subfamily member 2	1355	3
14	.RQS*S*VTSQSQDV ASLSSPSR.	2266.97	-0.308	2	6.03	0.1	38/76	10.6	MS2&MS3	IPI:IPI00558864.1 Gene_Symbol=Atp2b2 Protein	966	1
15	.KLEKEEEEGISQES *S*EEEQ.	2396.93	-0.426	2	5.95	0.3	39/72	3.76	MS2&MS3	IPI:IPI00203725.2 Gene_Symbol=Hmg1 Isoform HMG-I of High mobility group protein HMG-I/HMG-Y	742	1
16	.KAEDS*DS*EPEPE DNVR.	1976.72	-1.771	2	5.75	0.4	39/60	3.72	MS2&MS3	IPI:IPI00357938.4 Gene_Symbol=Xrm2 5'-3' exoribonuclease 2	729	1
17	.GNKS*PS*PPPDGS* PAATPEIR.	2214.89	-1.121	2	5.67	0.2	43/95	7.08	MS2&MS3	IPI:IPI00196509.2 Gene_Symbol=Bin1 Isoform AMPH2-1 of Myc box-dependent-interacting	907	1

										protein 1		
18	.VSEEDQS*LENS*E ADVK.	1938.73	-1.699	2	5.45	0.3	37/60	3.47	MS2&MS3	IPI:IPI00192286.1 Gene_Symbol=Abca2 ATP-binding cassette sub-family A member 2	995	1
19	.S*RTAS*LT*SAAS* IDGSR.	1899.67	-1.153	2	5.35	0.1	38/90	10.7	MS2&MS3	IPI:IPI00326606.4 Gene_Symbol=Ndr2 Isoform 2 of Protein NDRG2	386	4
20	.AKTDHGAEIVYKS *PVVS*GDT*PR.	2654.13	-1.856	3	5.28	0.1	60/220	7.79	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	668	1
21	.S*HS*SPLNPDAS* PVTAK.	1934.73	-0.731	2	5.28	0.1	44/80	7.59	MS2&MS3	IPI:IPI00358275.3 Gene_Symbol=Psd3 similar to Pleckstrin and Sec7 domain containing protein 3	1444	3
22	R.S*RT*AS*LTSAA SIDGSR.S	1819.70	-0.811	2	5.25	0.1	40/75	10.7	MS2&MS3	IPI:IPI00326606.4 Gene_Symbol=Ndr2 Isoform 2 of Protein NDRG2	833	1
23	.TDHGAEIVYKS*PV VS*GDT*SPR.	2455.00	-1.530	2	5.24	0.1	45/100	5.3	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated	434	2

										protein tau		
24	.SPA EAKS*PAEAKS *PAEAK.	1928.84	-0.160	3	5.13	0.3	53/136	6.96	MS2&MS3	IPI:IPI00188524.2 Gene_Symbol=Nefh Neurofilament heavy polypeptide	914	1
25	.SLS*TSGESLYHVL GLDK.	1885.89	-0.707	2	5.12	0.1	27/48	5.24	MS2&MS3	IPI:IPI00210881.1 Gene_Symbol=Dnajc5 DnaJ homolog subfamily C member 5	575	2
26	.AKTDHGAEIVYKS PVVS*GDTS*PR.	2574.16	-0.360	3	5.03	0.1	46/176	7.79	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	536	12
27	.KGAE EEEEEEDDD S*EEEEIK.	2318.86	-1.700	2	4.81	0.3	32/54	3.46	MS2&MS3	IPI:IPI00778976.1 Gene_Symbol=Epb4.9 45 kDa protein	548	1
28	.S*AGSSSPEAGEDS *DHEDGNYCPPVK R.	2908.08	-1.314	3	4.80	0.2	46/200	4.1	MS2&MS3	IPI:IPI00558170.2 Gene_Symbol=Ranbp3 similar to RAN binding protein 3 isoform RANBP3-b	476	4
29	.GNKS*PS*PPPDGS PAATPEIR.	2134.92	-0.452	2	4.69	0.2	39/76	7.08	MS2&MS3	IPI:IPI00196509.2 Gene_Symbol=Bin1 Isoform AMPH2-1 of Myc box-dependent-interacting	785	1

										protein 1		
30	.TDHGAEIVY*KSPV VS*GDT*SPR.	2455.00	0.095	2	4.66	0.3	34/100	5.3	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	246	6
31	.ESLKEEDES*DDDN M.	1735.59	-0.346	2	4.63	0.3	24/39	3.25	MS2&MS3	IPI:IPI00476178.3 Gene_Symbol=Psm31;Psm a3 Proteasome subunit alpha type-3	766	1
32	.EQES*S*GEEDNDL SPEER.	2109.72	-0.700	2	4.55	0.3	30/64	3.36	MS2&MS3	IPI:IPI00400646.7 Gene_Symbol=Ppp1r2 Protein phosphatase inhibitor 2	901	1
33	.GNKS*PSPPPDGS* PAATPEIR.	2134.92	-1.578	2	4.43	0.2	31/76	7.08	MS2&MS3	IPI:IPI00196509.2 Gene_Symbol=Bin1 Isoform AMPH2-1 of Myc box-dependent-interacting protein 1	488	4
34	.S*HSSPS*LNPDASP VTAK.	1854.77	-0.083	2	4.24	0.1	33/64	7.59	MS2&MS3	IPI:IPI00358275.3 Gene_Symbol=Psd3 similar to Pleckstrin and Sec7 domain containing protein 3	769	4
35	.NIVTPRT*PPPSQG K.	1571.79	-0.398	2	4.17	0.2	26/39	11.5	MS2&MS3	IPI:IPI00231265.2 Gene_Symbol=Mbp Isoform 5 of Myelin basic protein S	714	1

36	.S*RTAS*LTSAASID GSR.	1739.74	0.059	2	4.17	0.2	34/60	10.7	MS2&MS3	IPI:IPI00326606.4 Gene_Symbol=Ndr2 Isoform 2 of Protein NDRG2	541	2
37	.SRS*PGT*PAGEGS GSPPK.	1728.70	-0.654	2	4.13	0.2	38/64	9.85	MS2&MS3	IPI:IPI00231810.1 Gene_Symbol=Add1 Isoform 2 of Alpha-adducin	1062	1
38	.SPA EAKS*PAEAKS *PAEAK.	1928.84	-0.776	2	4.09	0.2	23/68	6.96	MS2&MS3	IPI:IPI00188524.2 Gene_Symbol=Nefh Neurofilament heavy polypeptide	262	11
39	.S*LSDPKPLSPT*AE ESAK.	1916.83	-0.683	2	3.93	0.3	34/64	4.49	MS2&MS3	IPI:IPI00212553.3 Gene_Symbol=Bsn Protein bassoon	446	1
40	.SPVVS*GDTS*PR.	1261.49	-0.287	2	3.90	0.1	32/40	6.55	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	1216	1
41	.GNKSPS*PPPDGS* PAATPEIR.	2134.92	-1.769	2	3.90	0.4	32/76	7.08	MS2&MS3	IPI:IPI00196509.2 Gene_Symbol=Bin1 Isoform AMPH2-1 of Myc box-dependent-interacting protein 1	385	6
42	.VKGSNYHLS*DND AS*DVE.	2009.75	-1.421	2	3.84	0.3	37/64	4	MS2&MS3	IPI:IPI00201395.3 Gene_Symbol=Slc2a13	612	1

										Proton myo-inositol cotransporter		
43	.S*LDS*DESEDEDD DYQQR.	2333.80	-0.247	2	3.82	0.5	27/68	3.48	MS2&MS3	IPI:IPI00208277.1 Gene_Symbol=Pdap1 28 kDa heat- and acid-stable phosphoprotein	293	2
44	.VVSS*T*SEEEAF TEK.	1831.69	-0.804	2	3.80	0.2	27/56	3.71	MS2&MS3	IPI:IPI00199013.7 Gene_Symbol=Oxr1 Isoform 1 of Oxidation resistance protein 1	493	6
45	.THT*SPPRAPS*SPG R.	1607.67	-0.249	2	3.78	0.2	27/52	12.5	MS2&MS3	IPI:IPI00373257.3 Gene_Symbol=- 45 kDa protein	352	5
46	.S*ADVS*PTTEGVK .	1350.52	-1.875	2	3.73	0.1	28/44	4.11	MS2&MS3	IPI:IPI00763055.1 Gene_Symbol=Trim2 tripartite motif-containing 2	637	1
47	.SENSS*T*QSSPEM PTTK.	1870.68	-0.785	2	3.60	0.2	24/60	4.31	MS2&MS3	IPI:IPI00359567.3 Gene_Symbol=Rap1gap similar to Rap1 GTPase-activating protein 1	329	11
48	.SM#S*DPKPLSPT* ADESSR.	1980.77	-1.861	2	3.57	0.1	30/64	4.35	MS2&MS3	IPI:IPI00203018.1 Gene_Symbol=Pclo Isoform 1 of Protein piccolo	624	1
49	.DTDAYSDLS*DGE KEAR.	1851.73	-1.195	2	3.42	0.3	27/45	3.73	MS2&MS3	IPI:IPI00213940.3 Gene_Symbol=Fam131b Protein FAM131B	425	1

50	.SEGPQLLT*PPQTS* PR.	1767.77	-1.944	2	3.36	0.2	30/56	6.75	MS2&MS3	IPI:IPI00944228.1 Gene_Symbol=LOC685202 coiled-coil domain containing 48 like	639	1
51	.MAVDS*S*MELLF LDTFK.	2038.82	-0.590	2	3.27	0.2	22/60	3.74	MS2&MS3	IPI:IPI00366816.4 Gene_Symbol=RGD155990 4 hypothetical protein LOC313061	431	3
52	.VKGSNYHLS*DND AS*DVE.	2009.75	-1.879	2	3.27	0.2	25/64	4	MS2&MS3	IPI:IPI00201395.3 Gene_Symbol=Slc2a13 Proton myo-inositol cotransporter	154	32
53	.GSNYHLS*DNDAS *DVE.	1782.59	-0.325	2	3.25	0.2	34/56	3.53	MS2&MS3	IPI:IPI00201395.3 Gene_Symbol=Slc2a13 Proton myo-inositol cotransporter	535	2
54	.SGYS*S*PGS*PGTP GSR.	1633.53	-1.670	2	3.21	0.1	39/70	9.65	MS2&MS3	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	845	1
55	.MNVPETMNEVLD MS*DDEGEDAITGD TDKYLGPQDLK.	4065.72	-1.717	3	7.62	0.2	58/210	3.38	MS2	IPI:IPI00389129.3 Gene_Symbol=Ank3 Ankyrin G197	1355	1
56	.AEPEKS*EGAAEEQ PEPAPAPEQEAAP	3645.62	-1.167	3	7.39	0.5	56/216	3.76	MS2	IPI:IPI00231651.6 Gene_Symbol=Basp1 Brain	1075	1

	GPAAGGEAPK.										acid soluble protein 1		
57	.TPEELEDDSD*DFEQ EDYDVR.	2410.91	-1.527	2	7.21	0.4	33/54	3.16	MS2	IPI:IPI00870129.1 Tax_Id=10116 Gene_Symbol=Ctnna2 catenin (cadherin associated protein), alpha 2	1416	1	
58	.IEKLPS*ISDLDSIFG PVLS*PK.	2415.19	-1.883	2	7.16	0.1	47/80	4.35	MS2	IPI:IPI00358365.3 Gene_Symbol=Sgip1 similar to SH3-domain GRB2-like (endophilin) interacting protein 1	1016	1	
59	.GGQDDDDAETGLT *EGEGEGEEKEPE NLGK.	3214.27	-0.962	3	7.09	0.4	59/174	3.42	MS2	IPI:IPI00201467.1 Gene_Symbol=Syt2 Synaptotagmin-2	1367	1	
60	.VSEEAESQWDTS KGDQVSQNGLP AEQGS*PR.	3424.49	-1.760	3	7.08	0.3	54/180	3.86	MS2	IPI:IPI00373419.2 Gene_Symbol=Sptbn1 Non-erythrocyte beta-spectrin	1462	1	
61	.TPEELDDSD*DFETE DFDVR.	2238.86	-1.026	2	6.83	0.2	34/51	3.19	MS2	IPI:IPI00358406.2 Gene_Symbol=Ctnna1 Catenin (Cadherin-associated protein), alpha 1, isoform CRA_b	1223	1	
62	.LNPETMTEVLDV S*DEEGDDTVTGDG	4017.77	-1.990	3	6.70	0.2	49/210	3.39	MS2	IPI:IPI00205634.4 Gene_Symbol=Ank2 similar	859	1	

	GEYLRPEDLK.										to ankyrin 2 isoform 2		
63	.KVSDVTSSGVQS*F DEEEGDANN.	2393.96	-1.803	2	6.42	0.2	40/63	3.4	MS2	IPI: IPI00213940.3 Gene_Symbol=Fam131b Protein FAM131B	1580	1	
64	.ANS*FVGTAQYVS PELLTEK.	2134.01	-1.791	2	6.40	0.2	35/54	4.31	MS2	IPI: IPI00195987.1 Gene_Symbol=Pdpk1 3-phosphoinositide-depende nt protein kinase 1	1994	1	
65	.NIDQSEFEGFS*FV NSEFLKPEVK.	2770.26	-1.957	3	6.27	0.2	45/132	4.05	MS2	IPI: IPI00189278.4 Gene_Symbol=Prkcb Isoform Beta-II of Protein kinase C beta type	938	1	
66	.IYQFPDCDS*DEDE DFKLQDQALK.	2899.20	-0.814	3	6.27	0.4	44/132	3.52	MS2	IPI: IPI00421642.1 Gene_Symbol=Sept4 EG3RVC	1069	1	
67	.TAKDS*DDDDVT VTVDR.	1946.79	-0.548	2	6.24	0.1	35/48	3.52	MS2	IPI: IPI00324381.5 Gene_Symbol=Stx1a Syntaxin-1A	1531	1	
68	.T*WTLCGTPEYLA PEILSK.	2272.10	-1.193	2	6.03	0.3	33/54	4.31	MS2	IPI: IPI00200013.4 Gene_Symbol=Prkaca Isoform 1 of cAMP-dependent protein kinase catalytic subunit alpha	1327	1	
69	.RAPPGPLPPAASPG PPAAS*PPAAPSSPR	2648.33	-1.392	3	5.89	0.5	57/162	12.5	MS2	IPI: IPI00464877.2 Gene_Symbol=Hcn2	2030	3	

										Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2		
70	.NLLEDDS*DEEEDFLR.	2065.83	-1.860	2	5.84	0.4	30/45	3.26	MS2	IPI:IPI00358945.2 Gene_Symbol=Vamp4 16 kDa protein	2243	1
71	.FSEMMDHMGGDE DVDLPEVDGADDD SQDS*DDEKMPDLE	4310.57	-1.073	3	5.83	0.6	51/222	3.14	MS2	IPI:IPI00365935.3 Gene_Symbol=Ptges3 Prostaglandin E synthase 3	1086	1
72	.RAS*VCAEAYNPD EEEDDAESR.	2492.95	-0.892	2	5.79	0.4	37/60	3.66	MS2	IPI:IPI00365600.3 Gene_Symbol=Prkar2b cAMP-dependent protein kinase type II-beta regulatory subunit	942	1
73	.SAKDS*DDEEEVV HVDR.	1909.78	-1.329	3	5.74	0.2	43/90	3.94	MS2	IPI:IPI00191730.1 Gene_Symbol=Stx1b Syntaxin-1B	1419	1
74	.TWT*LCGTPEYLA PEIILSK.	2272.10	-0.784	2	5.71	0.3	32/54	4.31	MS2	IPI:IPI00200013.4 Gene_Symbol=Prkaca Isoform 1 of cAMP-dependent protein kinase catalytic subunit alpha	1317	1
75	.S*ASPDDDLSSN	2514.99	-0.917	2	5.65	0.3	27/66	3.3	MS2	IPI:IPI00371185.2	1202	1

	WEAADLGNEER.									Gene_Symbol=RGD131170 3 Similar to sid2057p		
76	.RGGGSGGGDES*E GEEVDED.	1917.66	-1.620	2	5.34	0.2	33/54	3.3	MS2	IPI:IPI00189358.2 Gene_Symbol=Purb Transcriptional activator protein Pur-beta	1045	1
77	.GATPAEDDEDNDI DLFGS*DEEEEDKE AAR.	3262.27	-1.862	3	5.33	0.4	43/168	3.31	MS2	IPI:IPI00197900.5 Gene_Symbol=Eef1d Translation elongation factor 1-delta subunit	543	1
78	.GHDLSPLAS*DILT NTSGSMDEGDDYL PPTTPAVEK.	3723.66	-1.391	3	5.31	0.1	46/204	3.61	MS2	IPI:IPI00206171.1 Gene_Symbol=Map2 Isoform MAP2x of Microtubule-associated protein 2	614	2
79	.ST*GGPPGPGPLPG PQGLSSSSGSR.	2214.02	-1.505	2	5.15	0.4	29/69	10.9	MS2	IPI:IPI00768248.1 Gene_Symbol=Agap2 Arf-GAP with GTPase, ANK repeat and PH domain-containing protein 2	646	1
80	.GVVTNGLDVS*PA EEK.	1594.74	-1.732	2	5.08	0.3	32/42	3.87	MS2	IPI:IPI00325609.4 Gene_Symbol=Nefm Neurofilament medium polypeptide	2113	1
81	.IYQFPDCDS*DEDE DFKLQDQALK.	2899.20	-1.508	3	4.98	0.3	31/132	3.52	MS2	IPI:IPI00421642.1 Gene_Symbol=Sept4	464	47

											EG3RVC		
82	.DWEDDS*DEDMSN FDR.	1955.63	0.011	2	4.94	0.3	30/42	3.18	MS2	IPI:IPI00365935.3 Gene_Symbol=Ptges3 Prostaglandin E synthase 3	2339	1	
83	.VDIITEEMPENALP S*DEDDKDPNDPYR	3197.35	-1.714	3	4.90	0.2	45/156	3.45	MS2	IPI:IPI00198486.3 Gene_Symbol=Ap3d1 Ap3d1 protein	1338	1	
84	.NIDQSEFEGFSFVN S*EFLKPEVK.	2770.26	-1.652	3	4.85	0.4	43/132	4.05	MS2	IPI:IPI00189278.4 Gene_Symbol=Prkcb Isoform Beta-II of Protein kinase C beta type	860	1	
85	.GTGLQPGEELPDI APPLVT*PDEPK.	2679.28	-0.898	2	4.85	0.4	26/72	3.47	MS2	IPI:IPI00207657.1 Gene_Symbol=Usp5 ubiquitin specific peptidase 5	961	1	
86	.ESLKEEDES*DDDN M.	1735.59	-0.743	2	4.81	0.3	24/39	3.25	MS2	IPI:IPI00476178.3 Gene_Symbol=Psm31;Psm a3 Proteasome subunit alpha type-3	633	1	
87	.MESEAGADDS*AE EGDLLDDDDNEDR GDDQLELK.	3691.42	-1.937	3	4.80	0.4	45/192	3.2	MS2	IPI:IPI00187860.3 Gene_Symbol=Hnrnpc Heterogeneous nuclear ribonucleoprotein C	552	1	
88	.AFYGSEEDEAKGP GS*EEAATAALPAR	2704.18	-1.854	3	4.77	0.5	41/150	3.93	MS2	IPI:IPI00767753.2 Gene_Symbol=Ap3b2 adaptor-related protein	1229	3	

										complex 3, beta 2 subunit		
89	.LTVEEATASVSEG GGLQGIS*MKDSDE EDEEDD.	3422.38	-0.814	3	4.74	0.4	40/186	3.1	MS2	IPI:IPI00199604.4 Gene_Symbol=Cadps Protein	854	2
90	.KGAEEDDDDD S*EEEEIK.	2318.86	-0.648	2	4.74	0.2	30/54	3.46	MS2	IPI:IPI00778976.1 Gene_Symbol=Epb4.9 45 kDa protein	468	1
91	.TGS*PLTVATGND QAATEAK.	1911.87	-1.000	2	4.69	0.2	25/54	4.11	MS2	IPI:IPI00358365.3 Gene_Symbol=Sgip1 similar to SH3-domain GRB2-like (endophilin) interacting protein 1	646	2
92	.GLYDGPVCEVSVT *PK.	1700.76	-0.717	2	4.61	0.2	28/42	4.11	MS2	IPI:IPI00870112.1 Gene_Symbol=Dpysl2 Dihydropyrimidinase-related protein 2	1918	1
93	.T*PEELDDDFETE DFDVR.	2238.86	-0.743	2	4.55	0.5	32/51	3.19	MS2	IPI:IPI00358406.2 Gene_Symbol=Ctnna1 Catenin (Cadherin-associated protein), alpha 1, isoform CRA_b	1161	2
94	.AGAYDFPS*PEWD TVTPEAK.	2160.92	-0.854	2	4.51	0.1	24/54	3.62	MS2	IPI:IPI00192337.1 Gene_Symbol=Camk2a Calcium/calmodulin-depend ent protein kinase type II	539	1

										alpha chain		
95	.GDQVSQNGLPAEQ GS*PR.	1819.80	-0.584	2	4.48	0.3	27/48	4.11	MS2	IPI:IPI00373419.2 Gene_Symbol=Sptbn1 Non-erythrocyte beta-spectrin	454	1
96	.EEAS*DDDMEGDE AVVR.	1862.66	-0.865	2	4.48	0.5	26/45	3.26	MS2	IPI:IPI00373118.2 Gene_Symbol=Ascc311 79 kDa protein	889	1
97	.ARPSQLPEQSSSAQ QNGSVSDIS*PVQA AK.	3047.44	0.213	3	4.48	0.2	38/168	7.12	MS2	IPI:IPI00367933.4 Gene_Symbol=Kif2a Isoform 2 of Kinesin-like protein KIF2A	584	27
98	.S*LDGEVGTGQYA TTK.	1606.70	-0.332	2	4.46	0.4	26/42	4.11	MS2	IPI:IPI00204503.1 Gene_Symbol=Epb4.113 Type II brain 4.1 minor isoform	1100	1
99	.IEDVGS*DEEDDSG KDK.	1817.70	-1.610	2	4.42	0.4	27/45	3.56	MS2	IPI:IPI00471584.7 Gene_Symbol=Hsp90ab1 Heat shock protein HSP 90-beta	291	3
100	.TFCGT*PDYIAPEII AYQPYGK.	2484.12	-0.406	2	4.35	0.3	28/60	4.11	MS2	IPI:IPI00189278.4 Gene_Symbol=Prkcb Isoform Beta-II of Protein kinase C beta type	860	2
101	.KLS*GDQITLPTTV DYSSVPK.	2229.11	-1.109	2	4.34	0.4	29/57	6.57	MS2	IPI:IPI00366400.1 Gene_Symbol=Ebag9	614	1

										Receptor-binding cancer antigen expressed on SiSo cells (Fragment)		
102	.DQNLQILEESRS* E.	1737.77	-0.814	2	4.31	0.1	27/39	3.72	MS2	IPI:IPI00208699.1 Gene_Symbol=Cntnap1 Contactin-associated protein 1	1249	1
103	.NIVTPRT*PPPSQG K.	1571.79	-0.737	2	4.21	0.2	28/39	11.5	MS2	IPI:IPI00231265.2 Gene_Symbol=Mbp Isoform 5 of Myelin basic protein S	851	1
104	.KEESEES*EDDMGF GLFD.	2043.74	-0.742	2	4.20	0.2	26/48	3.3	MS2	IPI:IPI00200145.1 Gene_Symbol=Rplp1 60S acidic ribosomal protein P1	1022	1
105	.GASS*PDMEPSYG GGLFDMVK.	2124.87	-1.220	2	4.16	0.4	21/57	3.74	MS2	IPI:IPI00358350.3 Gene_Symbol=Dnajc6 DnaJ (Hsp40) homolog, subfamily C, member 6	378	1
106	.IGFGPS*PFSLTEGL PK.	1726.85	-1.336	2	4.15	0.1	28/45	7.01	MS2	IPI:IPI00188524.2 Gene_Symbol=Nefh Neurofilament heavy polypeptide	804	1
107	.S*PDTSAYCYETM EK.	1761.64	-0.709	2	4.12	0.2	23/39	3.87	MS2	IPI:IPI00372009.3 Gene_Symbol=Map1b microtubule-associated protein 1B	633	1
108	.SLS*TSGESLYHVL	1885.89	-0.928	2	4.05	0.1	28/48	5.24	MS2	IPI:IPI00210881.1	380	2

	GLDK.										Gene_Symbol=Dnajc5 DnaJ homolog subfamily C member 5		
109	.T*ASL TSAASIDGSR.	1416.64	-0.781	2	3.98	0.2	28/39	6.5	MS2	IPI:IPI00326606.4 Gene_Symbol=Ndr g2 Isoform 2 of Protein NDRG2	1195	2	
110	.KEES*EESEDDMGFGLFD.	2043.74	-0.668	2	3.94	0.2	25/48	3.3	MS2	IPI:IPI00200145.1 Gene_Symbol=Rplp1 60S acidic ribosomal protein P1	965	2	
111	.HPPVLT*PPDQEVIR.	1677.84	-1.438	2	3.91	0.4	24/39	5.24	MS2	IPI:IPI00189278.4 Gene_Symbol=Prkcb Isoform Beta-II of Protein kinase C beta type	658	1	
112	.SPVVSGDT*SPR.	1181.52	-0.640	2	3.88	0.3	25/30	6.55	MS2	IPI:IPI00230972.2 Gene_Symbol=Mapt Isoform Tau-E of Microtubule-associated protein tau	1370	2	
113	.T*PGPLSSQGAPVDTQPAAQK.	2029.96	-0.907	2	3.88	0.3	23/57	6.5	MS2	IPI:IPI00210153.4 Gene_Symbol=Synj1 Isoform 1 of Synaptojanin-1	405	2	
114	.EGDGSATTTDAAPAT*SPKAEEPSK.	2296.98	-1.703	2	3.86	0.5	20/66	3.96	MS2	IPI:IPI00212320.1 Gene_Symbol=Gap43 Neuromodulin	221	1	
115	.EGDGSATTTDAAPA	1655.68	-0.864	2	3.83	0.1	25/48	3.74	MS2	IPI:IPI00212320.1	827	1	

	TS*PK.										Gene_Symbol=Gap43 Neuromodulin		
116	.SATSSSPGS*PLHSL ETSL.	1837.82	-0.820	2	3.81	0.2	22/51	5.15	MS2	IPI:IPI00194873.1 Gene_Symbol=Atp2b1 Isoform D of Plasma membrane calcium-transporting ATPase 1	655	1	
117	.KEESEES*DDDMG FGLFD.	2029.73	-0.404	2	3.77	0.1	26/48	3.25	MS2	IPI:IPI00188804.1 Gene_Symbol=Rplp2 60S acidic ribosomal protein P2	939	1	
118	.Y*TFQDFTEQFQVL LPK.	2083.98	-0.322	2	3.72	0.2	19/45	4.11	MS2	IPI:IPI00339187.3 Gene_Symbol=Myo9b Myosin-IXb	386	40	
119	.SPA EAKS*PAEAK.	1265.58	-0.676	2	3.68	0.3	26/33	6.88	MS2	IPI:IPI00188524.2 Gene_Symbol=Nefh Neurofilament heavy polypeptide	814	1	
120	.GVVTNGLDVS*PA EEK.	1594.74	-1.648	2	3.67	0.3	22/42	3.87	MS2	IPI:IPI00325609.4 Gene_Symbol=Nefm Neurofilament medium polypeptide	455	2	
121	.S*GDETPGSEAPGD K.	1426.54	-0.490	2	3.63	0.3	26/39	3.62	MS2	IPI:IPI00360386.3 Gene_Symbol=Hnrnpul2 similar to heterogeneous nuclear ribonucleoprotein U	1100	1	

										isoform a		
122	.RDS*SDDWEIPDG QITVGQR.	2253.98	-0.655	2	3.61	0.1	20/54	3.8	MS2	IPI:IPI00373550.4 Gene_Symbol=Braf similar to v-raf murine sarcoma viral oncogene homolog B1	307	21
123	.QQPHLQPQNT*PIM PVR.	1963.96	-1.445	2	3.60	0.3	23/45	10.8	MS2	IPI:IPI00778493.1 - Gene_Symbol=Serpinf1 41 kDa protein	228	15
124	.DIIRQPS*EEEIHK.	1649.81	-0.944	2	3.57	0.1	24/36	4.21	MS2	IPI:IPI00555213.1 Gene_Symbol=Pea15a Astrocytic phosphoprotein PEA-15	320	4
125	.VDHGAEIITQS*PS R.	1589.73	-1.066	2	3.56	0.2	24/39	5.24	MS2	IPI:IPI00206171.1 Gene_Symbol=Map2 Isoform MAP2x of Microtubule-associated protein 2	437	1
126	.LIGTAVPQRSTS*PT GPK.	1702.89	-1.550	2	3.55	0.1	23/45	11.5	MS2	IPI:IPI00360288.1 Gene_Symbol=Mapre3 Microtubule-associated protein RP/EB family member 3	409	1
127	.TGEPDEEEGTFRSS *IR.	1889.79	-0.546	2	3.54	0.1	27/45	4.05	MS2	IPI:IPI00193828.1 Gene_Symbol=Fxyd1 Phospholemman	471	1
128	.MRRCPIDGEAT*SD	2003.81	-1.935	2	3.51	0.2	20/45	6.41	MS2	IPI:IPI00208650.1	606	1

	MDR.										Gene_Symbol=Dlgap4 Disks large-associated protein 4		
129	.VQSLEGEKLS*PK.	1394.69	-1.840	2	3.51	0.3	25/33	7.09	MS2	IPI:IPI00372009.3 Gene_Symbol=Map1b microtubule-associated protein 1B	827	1	
130	.SSSS*SSSGVGSPA VTPTEK.	1831.80	-0.801	2	3.50	0.2	26/54	6.74	MS2	IPI:IPI00187782.2 Gene_Symbol=Srgap3 similar to SLIT-ROBO Rho GTPase-activating protein 3	884	2	
131	.KPGNNEGSGAPS*P LSK.	1619.74	-1.883	2	3.47	0.1	19/45	9.57	MS2	IPI:IPI00215134.1 Gene_Symbol=Snap91 Isoform Long of Clathrin coat assembly protein AP180	219	21	
132	.NTPQLWSVPS*ELL K.	1691.84	-1.914	2	3.46	0.1	18/39	6.55	MS2	IPI:IPI00365435.4 Gene_Symbol=LOC683446 38 kDa protein	237	68	
133	.IEDVGS*DEEDDSG KDKK.	1945.79	-0.437	2	3.46	0.2	33/48	3.82	MS2	IPI:IPI00471584.7 Gene_Symbol=Hsp90ab1 Heat shock protein HSP 90-beta	699	1	
134	.VQTT*PPPTIQGQK.	1474.73	-0.408	2	3.46	0.1	24/36	10.1	MS2	IPI:IPI00556943.2 Gene_Symbol=Aak1 similar to AP2 associated kinase 1	710	1	

135	.Y*QEFHHLRPLK.	1648.80	-1.973	2	3.45	0.2	18/33	9.49	MS2	IPI:IPI00370530.4 Gene_Symbol=Tbc1d2b TBC1 domain family, member 2B	215	22
136	.ASGQAFELILS*PR.	1468.72	-0.440	2	3.43	0.4	22/36	7.1	MS2	IPI:IPI00231697.5 Gene_Symbol=Stmn1 Stathmin	1044	2
137	.ASGQAFELILS*PR.	1468.72	-1.663	2	3.40	0.3	24/36	7.1	MS2	IPI:IPI00231697.5 Gene_Symbol=Stmn1 Stathmin	1378	1
138	.SVLWDKLNKNS*TV HGGVR.	1976.01	-1.502	2	3.37	0.4	21/48	10.5	MS2	IPI:IPI00366881.2 Gene_Symbol=Lars2 leucyl-tRNA synthetase 2, mitochondrial	314	39
139	.GGLS*DGEGPPGG R.	1235.51	-0.301	2	3.36	0.4	29/36	4.11	MS2	IPI:IPI00208115.4 Gene_Symbol=Sv2a Synaptic vesicle glycoprotein 2A	1029	1
140	.NIVTPRT*PPPSQG K.	1571.79	-0.603	2	3.36	0.2	20/39	11.5	MS2	IPI:IPI00231265.2 Gene_Symbol=Mbp Isoform 5 of Myelin basic protein S	386	3
141	.KLNKTDEEISS*.	1343.61	-0.905	2	3.32	0.4	21/30	4.49	MS2	IPI:IPI00205372.3 Gene_Symbol=Stxbp1 Isoform 1 of Syntaxin-binding protein 1	238	9
142	.DFQEYVEPGEDFP	2190.90	-1.634	2	3.32	0.3	25/51	3.54	MS2	IPI:IPI00213552.1	815	1

	AS*PQR.										Gene_Symbol=Dync11i1 Cytoplasmic dynein 1 light intermediate chain 1		
143	.TASL TSAAS*IDGSR.	1416.64	-1.054	2	3.30	0.1	27/39	6.5	MS2	IPI:IPI00326606.4 Gene_Symbol=NdrG2 Isoform 2 of Protein NDRG2	1017	1	
144	.TIKS*PCDSGYSYE TIEK.	2057.88	-0.724	2	3.28	0.1	24/48	4.49	MS2	IPI:IPI00372009.3 Gene_Symbol=Map1b microtubule-associated protein 1B	380	3	
145	.CT*LQWEDEGQVV LNR.	1926.84	-1.608	2	3.26	0.1	24/42	3.87	MS2	IPI:IPI00358054.3 Gene_Symbol=Il12rb2 similar to Interleukin-12 receptor beta-2 chain precursor	889	2	
146	.HVPNS*IGFEVELQ LDWQK.	2219.05	-1.706	2	3.26	0.1	20/51	4.47	MS2	IPI:IPI00870485.1 Gene_Symbol=Itga5 integrin alpha 5	435	1	
147	.Y*TFQDFTEQFQVL LPK.	2083.98	-1.108	2	3.23	0.1	21/45	4.11	MS2	IPI:IPI00339187.3 Gene_Symbol=Myo9b Myosin-IXb	462	1	
148	.SPFEIISPASPPEM T*GQR.	2120.97	-0.741	2	3.23	0.1	19/54	4.31	MS2	IPI:IPI00199693.2 Gene_Symbol=Map1a Microtubule-associated protein 1A	409	7	

149	.TAS*LTSAASIDGS R.	1416.64	-0.332	2	3.21	0.2	20/39	6.5	MS2	IPI:IPI00326606.4 Gene_Symbol=Ndrp2 Isoform 2 of Protein NDRG2	459	5
150	.VENVKGAVWT*V DEVEYQK.	2173.02	-1.778	2	3.18	0.3	19/51	4.21	MS2	IPI:IPI00215203.4 Gene_Symbol=Foxp2 similar to forkhead box P2	341	72
151	.VQPHQVDILASCN LS*QGTR.	2203.03	-0.137	2	3.17	0.2	21/54	7.14	MS2	IPI:IPI00367050.3 Gene_Symbol=Cd226 CD226 molecule	375	9
152	.LDKDGIPVSS*EAE R.	1595.73	-1.523	2	3.13	0.1	21/39	4.11	MS2	IPI:IPI00569865.1 Gene_Symbol=Ergic3 44 kDa protein	978	1
153	.S*KEQLNSYT.	1149.48	-0.804	2	3.12	0.5	19/24	6.72	MS2	IPI:IPI00206643.2 Gene_Symbol=Gpm6b 36 kDa protein	823	1

Phosphorylation Site