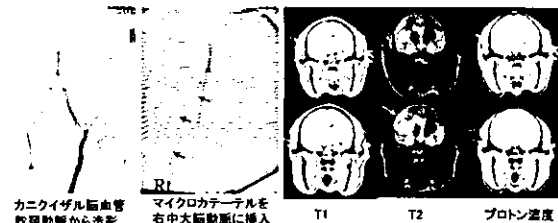


現在進行中の実験

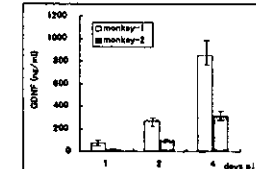
・中大脳動脈閉塞モデル



- ・X線透視下で大脳動脈よりマイクロカテーテルを挿入
- ・右中大脳動脈へアクセスし閉塞を試みた
- ・現在まで4例試みたが、いずれも閉塞後3日までに死亡
- ・条件の検討が必要

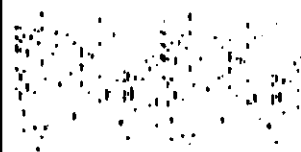
現在進行中の実験

・全脳虚血モデルの作成とSeVVG/GDNFの有効性評価



- ・カニクイザルの脳室内にSeVVG/GDNF 1×10^8 CIU/ml を1ml投与
- ・経時的に腰槽より髄液採取した。投与後早期(8時間)にGDNFを発現、4日後にピークとなる

抗体アレイを用いたカニクイザル脳内発現タンパクの網羅的解析

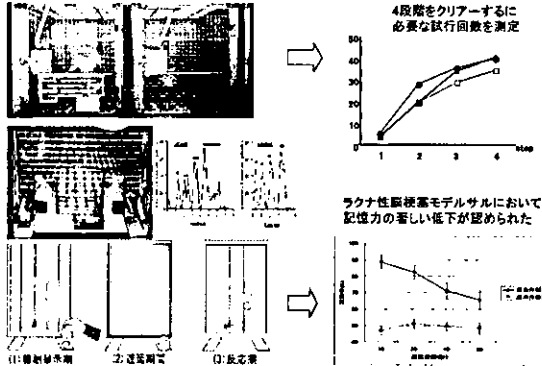


Power Biot法

- ・1,050のヒト抗体を用いたWB
- ・カニクイザル脳蛋白との交叉反応試験、435種の蛋白が解析可能

・高次認知機能・運動機能を指標としたサル類の治療評価

4段階迷路試験、遅延型認知記憶試験、運動機能試験など



ラクナ性脳梗塞モデルサルにおいて記憶力の著しい低下が認められた

これからの研究の進め方

- ①モデルの開発、改良、解析を進める
- ②脳梗塞治療用ベクターの大量生産
- ③種々の脳梗塞における神経増殖因子以外の有効な治療用遺伝子の検索
- ④新世界ザルであるマーマセットを用いて、造血細胞に治療用遺伝子を搭載した新規治療法の試み
- ⑤微小脳梗塞領域の蛋白発現解析による新規治療遺伝子・蛋白の検索
- ⑥運動機能、高次学習・認知機能などを指標とした治療の有効性評価法の確立
- ⑦fMRI、脳波、髄液などの臨床所見と組織病変の相関を明らかにする

ご静聴ありがとうございました。

資料・業績

資料

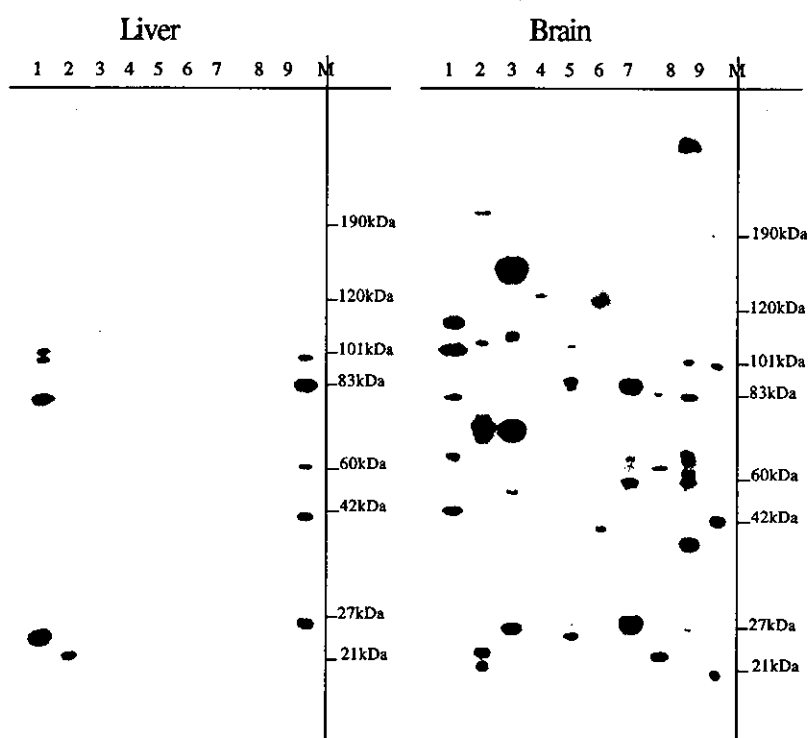
カニクイザル脳で発現しているタンパクの網羅的解析

10 歳齢の正常雄カニクイザルから摘出した脳の全組織を細胞溶解バッファー (1% SDS、10mM Tris-HCl (pH7.4)、1mM Sodium Ortho Vanadate) で溶解後、1,000 種のヒトモノクローナル抗体をアレイとして発現タンパクを網羅的に解析した。

シグナルとして認識できるバンドのうち、シグナル強度 9,000 以上のものを反応性ありと判断した。その結果、435 種のタンパクの発現が確認された (別表)

図は解析結果の一例

A1-A9



Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
Synapsin I	80	5972296.92	+
CaM Kinase II	52	3565232.37	+
Dynamin	100	2224679	+
b-Spectrin II	280	1338309.67	+
KNP-1/HES1	28	1262717	+
CtBP1	48	1251893.28	+
Hsp60	60	1025640.01	+
Dematin	48-52	956378.57	+
PKCa	82	955416	+
Munc-18	68	882199	+
AP180	180	840661	+
MEK1	45	810982.64	+
ERK1	44/42	794146.17	+
SCAMP1	36	765534.96	+
Rap2	21	745107.53	+
GFAP	50	739660.79	+
TNIK	150	667830.66	+
EAAT2	66	663039	+
Synaptophysin	33	650853.51	+
b-Arrestin1	55	643521.71	+
OPA1	80-100	623936.78	+
Rab5	25	615896.44	+
Gao	40	592837.57	+
ERK1	44/42	585626.34	+
Glutamine Synthetase	45	570334	+
Phospholipase Cg1	148	568629.71	+
ERK (pan ERK)	42-85	566120.96	+
MnSOD	25	552587.1	+
TIP120	120	543160.79	+
SNAP-25	25	534237	+
NSF	82	534200.06	+
ATP Synthase b	55	523976.83	+
CaM Kinase Kinase	68	508985	+
PKARIIb	53	500462	+
Flotillin-2/ESA	42	498703.13	+
Clathrin Heavy Chain	180	484157.29	+

Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
Rabphilin-3A	75	443151	+
PEX1	143	435562.9	+

DDB1	127	430165.55	+
JNKK2/MKK7	52	414421	+
Hsp40	40	392460	+
RNCAM	125/94	386651.31	+
AP50	50	385413.88	+
DLP1	84/79	367698	+
CPG16/CaM Kinase VI	48/96	366554.18	+
p120 Catenin/pp120 (src substrate)	120	363454.39	+
AKAP79	79	349367.27	+
Metaxin	35	344361.17	+
b-Catenin	92	343137.39	+
PKCe	90	333183	+
Carboxypeptidase E	50	330620	+
GRIM-19	16	322985	+
VCP	97	302137	+
Phospholipase Cd1	87	300651.2	+
Flotillin-1	48	300558.44	+
SII/TFIIS	38	296373	+
ILKAP	47	293594.66	+
Adaptin b	106	286837.17	+
ERAB	27	281796.94	+
Gat	40	280401	+
PMCA2	129-133	261817	+
ERK2	42	259570	+
drp1	27	251583.17	+
Transportin	101	251555.88	+
Chk2	60	250344.76	+
a-Spectrin II	250	244588.18	+
PP2A Catalytic a	36	242433.22	+
p47A	50/47	236111	+
PI3-Kinase	85	232712.1	+
ALDH	55	224307	+
Contactin	135	223506.18	+
Phosphatase Methylesterase-1	44	221819.03	+
Syndapin I	52	221250.29	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
53BP2	137	213713	+
hILP/XIAP	57	213172.87	+
BRAMP2	96/89	208302	+
Caspase-8	55/40/23	201971.15	+
Amphiphysin	125	201346	+
Rab3	25	199165	+

p54nrb	60	133404.94	+
ZBP-89	74	133083.3	+
CHD3	221	133082	+
N-Copine	62	130718.61	+
PKARIIb (pS114), Phospho-Specific	53	125912.14	+
EB3	38	123764	+
Casein Kinase Ie	47	119286	+
PCMT-I/II	25	119217	+
Karyopherin α /Rch-1	58	115120	+
α -Actinin	104	114900.51	+
PKARIIb (pS114), Phospho-Specific	53	112926	+
PITPa	32	112897	+
Dynactin p50	50	112701	+
p130Cas	130	110040.5	+
SRPK2	115	110013.82	+
CRP1	23	109897	+
Ras	21	108454.96	+
ASAP1	130	107723.93	+
PYK2/CAK b	116	106389.73	+
NMDAR2A	180	106366.35	+
Rac1	21	106222	+
B-Raf	95/72	103160.85	+
Ran	25	101529.58	+
Vti1a	29	100790.28	+
Dystrobrevin	87	95663	+
Sec8	110	95547	+
BMX	80	94561.09	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
ARF3	20	93460	+
PKC β	80	91844	+
Tom20	18	91339.2	+
NES1	30	90791	+
CDCrel-1	42	90431	+
Beclin	61	90222.28	+
NCS-1	21	88649.19	+
CPG16/CaM Kinase VI	48/96	87856.79	+
RIP2/RICK	61	86896.66	+
G β	37	85425.78	+
RNCAM	125/94	83666.9	+
BiP/GRP78	78	82446	+
Cdk7	42/44	82354.49	+
Hsp90	90	82179.09	+

b-Dystroglycan	43	199058	+
Synapsin IIa	74	198872	+
p190-B	195	198635.28	+
ATP Synthase a	55	198213.39	+
DAP3	46	198137.26	+
Rsk	90	196950.2	+
B2 Bradykinin Receptor	42	196472	+
MEK2	46	194380.84	+
Ras-GAP	120	190614.36	+
SCAR-1/WAVE-1	80	188786.33	+
VHR	20	188717.4	+
Topo IIb	180	187828.17	+
Zn-a2-glycoprotein	41	187697.07	+
Synaptotagmin	65	187544	+
GRIP	130	186953.24	+
B56a	56	185182.78	+
Hsp70	70	183692.99	+
NTF2	15	182171.58	+
TIEG2	72	181654.01	+
pICln	37/42	180729.49	+
MAD2B/Rev7	26	172535.65	+
Tau	50-68	172473	+
Smg GDS	57	172410.5	+
Na ⁺ ,K ⁺ ATPase b2	45	169960	+
d-Catenin	160	169928.56	+
PKR/p68 Kinase	68	169380.33	+
Annexin VI	70	168177.1	+
MAP2B	280	167298	+
Tomosyn	130	165268	+
N-Cadherin	130	161192	+
Cypher1	80	158840.41	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
SIRPa1	90	155881	+
Sema4C	100	147893.87	+
FIP-2	74	147855	+
Ral A	24	146862.22	+
KAP3A	100	145737.66	+
Annexin IV	36	144502	+
eIF-5a	18	143591.95	+
pan-JNK/SAPK1	49	143109	+
PTP1D/SHP2	72	142416.97	+
GSK-3b	46	139083.85	+

Neurotensin Receptor 3	95	81769	+
CDC5L	105	81670.04	+
Endothelin 1 Receptor	50	81201	+
Hsp75/TRAP1	75	81068	+
TRP32	32	80941	+
CAPS	145	78238.65	+
EphA4/Sek	130	77882	+
MEK5	50	77877	+
EB1	30	77653.59	+
CASK	120	77196	+
GABABR2	130	76133.26	+
JAK1	130	75884.99	+
PKARIIa	51	75720.17	+
Stat1 (N-terminus)	91/84	75072	+
fyn	59	73924.08	+
ShcC	69/55	72115	+
Rab8	24	70370.7	+
Calcineurin	61	70367	+
UBE3A	100	66788.28	+
Striatin	110	66460.55	+
C-Raf	74	66400.89	+
VAP33	33	66133.15	+
FKBP51	51	65774.99	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
MEF2D	70	65418.71	+
p190	190	65339.2	+
IKKg/NEMO	48	65189.23	+
ECA39	43	64737	+
Yes	62	64056	+
Golgin-84	84	61610.18	+
Rab4	25	61569	+
a-/b-SNAP	35/36	61249.41	+
CaM Kinase IV	60	60889.29	+
p67phox	67	60694.53	+
MYPT1	130	60551.13	+
Rab11	24	60340.45	+
Heme Oxygenase 2	36	59959.55	+
ENC-1	66	59724	+
TFIIB	33	59627.37	+
TRAX	33	59427.45	+
PKAC	40	59327.15	+
CLA-1	80	59096.56	+

p43/EMAP II precursor	43/21	58329.14	+
Phosphoserine		57903.47	+
PKCq	79	57835.77	+
R-Cadherin	100	57557	+
Gephyrin	93	57305.89	+
BERP	82	57228.98	+
CDC42	22	56876.65	+
Synaptojanin 1	140	56766	+
Intersectin/ESE-1	140/200	56637	+
NHE-1	92	56539	+
Mint2	120	56512.93	+
TRAF4/CART-1	53	56367.86	+
ABR	100	56011	+
SMN	40	55599.29	+
Stathmin/Metablastin	19	54991.87	+
Csk	50	54735.84	+
Gelsolin	93	53619.65	+
Tenascin-R/Janusin	180/160	52882	+
GCIP	46	52538.79	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
AF6	182	51754	+
Rabex-5	60	51210.34	+
PARP	113	50352.19	+
CRIK	240	50332.94	+
Nucleoporin p62	62	50175.76	+
PSD-95	95	50095	+
Calnexin	90	50039.13	+
Mena	140/88/80	49989	+
TLS	65	49021.71	+
Fascin	55	48686.7	+
Stat3	92	48357.85	+
eIF-6	27	48118.6	+
EEA1	180	47878	+
TIAR	50/42	46969	+
EBP50	50-53	46165	+
Vti1b	27	45426	+
eIF-5	49	44877.33	+
RPTPa	130	44779.69	+
ROCK-II/ROKa	180	44599.38	+
LR11/SorLA/gp250	250	44221	+
Neuronal Pentraxin	47	41671	+
Rim	173	41447	+

PI4-Kinase b	110	40554.21	+
VASP	46	40154	+
CAS	100	40092.02	+
basic FGF	18-24	39903	+
Stat1 (C-terminus)	91/84	39666.8	+
RBBP	48	39350.96	+
Kip1/p27	27	39201.14	+
Lysophospholipase	60	39113.38	+
Connexin-43	43	38906	+
Lyn	56	38779.88	+
Adaptin g	104	38227.11	+
BRIDGE-1	28	38155.08	+
PKBa/Akt	59	38095.19	+
Profilin	15	37175.45	+
b-Synuclein	19	37004.03	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
PMS2	96	36753	+
Bub3	40	36363.94	+
PP5/PPT	58	36240	+
LCB1	53	36104.43	+
FBP	74	35605	+
Integrin α 2/VLA-2a	150	35416.25	+
CIP4	80	35130.73	+
FIN13	75	34796.76	+
α -Catenin	102	34791.37	+
Adaptin d	160	34777	+
Guanylate Kinase	22	34330.43	+
RhoGDI	28	33884.21	+
NCK	47	32877.5	+
I κ Be	45	32586.08	+
PACS-1a	120	32185	+
LAR	150	31977.41	+
SH2-B	100	31624.37	+
L1	200	31513.22	+
Neurabin	180	31303	+
Pax-5	50	30172	+
eIF-4E	25	29372.18	+
Selenoprotein P	57/45	29281.72	+
BPntase	43	28541.16	+
KRIP-1	105	28288.71	+
Hip1R	120	27984.72	+
GRB2	24	27406.35	+

JAM-1	38	27400	+
STI1/Hop-p60	62	27348.12	+
BART	19	27300.47	+
TIP49b	52	27290.36	+
eps8	97	27261	+
AMPK b	38	27037.34	+
SQS	48	26681.13	+
Mre11	81	26357.84	+
STRAP	39	26187.46	+
Hsp110	110	26035.54	+
14-3-3	30	25717	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
HIP1	116	25657.9	+
Psme3/PA28-g	36	25656.93	+
p38d/SAPK4	42	25332.74	+
Per2	105	25175.77	+
YT521-B	110	25041.37	+
GGA3	90	24617.6	+
Gap1m	100	24477	+
KIF2	110	24322	+
LSH	105	24095.2	+
c-Cbl	120	24088.34	+
p19Skp1	19	23994	+
NMDAR2B	180	23853	+
Rho	21	23635.63	+
Nek2	46	23582.04	+
Syntaphilin	68	22955.34	+
p47A	50/47	22773	+
Elongin C/SIII p15	15	22744.15	+
SGT1	45	22690	+
DEK	43	22300.24	+
JAB1/CSN5	38	22267.92	+
Collybistin	62	22157.26	+
La Protein	47	21458	+
NDP52	52	21395	+
Caspase-14	36	21286.89	+
g-Catenin	82	21072	+
Rab24	23	20999	+
Nip1	26	20661.51	+
ACAP2	90	20583.79	+
Integrin b3	104	20399.05	+
Hsp40	40	20332.77	+

Synaptotagmin V	48	19817.66	+
GST-p	23	19704.46	+
Sec31A	148	19640	+
Stat3 (pS727), Phospho-Specific	92	19596.99	+
BAG-1	50/46/33	19509	+
JNK1/JNK2	54/46	19424.88	+
Kanadaptin	53	19376.42	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
GCAP-1	23	19096	+
Crk	40	19058.65	+
Tat-SF1	140	18957.29	+
Peroxiredoxin V	15	18946.96	+
DSIF	160	17796.69	+
LSF	63	17754	+
Desmoglein	165	17556.39	+
Adaptin e	127	17361.25	+
Apaf-1	130	17337	+
SNX1	74	17317.75	+
p36/MAT1	36	16846	+
Vesl-1L	45	16824	+
PAI-1	47	16787.49	+
RAFT1/FRAP	245	16619	+
Calcium Channel $\alpha 2d-2/Cacna2d2$	150	16430.83	+
eps15	145	16424	+
Smad2/3	58	16397	+
Bcl-2	26	16221	+
GOK/Stim1	84	15962	+
MCM	83	15946.12	+
IAK1/Aurora-A Kinase	46	15638.86	+
Occludin	65	15516	+
COMT	24/28	15507.75	+
HsORC4	45	15457	+
Exportin-1/CRM1	112	15388	+
Annexin XI	56	15259.42	+
GIT2-short	55	15015.01	+
TGN38	85-95	14909	+
MST3	52	14718.08	+
hPrp17	66	14664.79	+
CDC37	50	14583.65	+
CA150	150	14553.44	+
Itch	113	14529.33	+
Ku70	70	14219	+

BM28	125	14215	+
LIMK1	72	14155.78	+
TFII-I/BAP-135	135/140	14082.03	+
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
LRP	110	13986.73	+
JIP-1	112	13854.89	+
DJ-3	46	13523.53	+
Hsp75/TRAP1	75	13440.67	+
RCC1	45	13439	+
Cortactin	85/80	13419.07	+
GSK-3b (pY216), Phospho-Specific	46	13303.02	+
RanBP3	80/100	13207	+
Karyopherin b	97	13045.09	+
PTEN	47	13013.59	+
KIF3A	80/85	12999	+
p55Cdc	55	12865.44	+
Thrombin Receptor/PAR1	47	12662	+
Ras-GRF2	135	12603.11	+
Rb2	130	12587.39	+
PKARI	48	12587	+
Ufd2/E4	146	12514	+
80K-H	90	12485.87	+
Acetylcholine Receptor a	49	12410.41	+
a-Methylacyl-CoA Racemase	42	12364.93	+
SHPS-1	100	12362	+
mEPHX	46	12207.17	+
ILK	50	12161.25	+
Caspase-2/ICH-1L	48	12101.62	+
ROCK-I/ROKb	160	12079	+
Symplekin	150	12002.41	+
Carbonic Anhydrase XIV	51	11888.57	+
Neuroglycan C	120-150	11803	+
FAK	125	11799	+
AFAP	110	11653	+
PKB Kinase/PDK1	63	11618.51	+
p95PKL/GIT	95	11583.98	+
CD54/ICAM-1	90-115	11564.01	+
APP-BP1	59	11526.81	+
ZIP Kinase	52	11511.91	+
JNKK1/MKK4	44	11366	+
CD40	44	11331.86	+

Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
HAX-1	35	11299.13	+
Cyclin D3	33	11240.78	+
BAF60a	60	11070.7	+
GAD67	67	11002.29	+
SNX2	72	10893	+
Aven	55	10858.62	+
TSC1/Hamartin	130	10765.35	+
Rb	110	10690.09	+
nNOS/NOS Type I	155	10643	+
SRC-1	165	10637.05	+
NABC1	110	10618.13	+
basic FGF	18-24	10614	+
eIF-4g	220	10594.63	+
PI3-Kinase p110a	110	10523.91	+
PI3-Kinase C2b	165	10466	+
Caspase-3/CPP32	32	10283.06	+
KIF1A	200	10166.41	+
Fatty Acid Synthase	265	9834	+
Neurabin II	140	9636.81	+
ProSAP1/CortBP1	180	9451.15	+
M33	55	9448	+
Intersectin/ESE-1	140/200	9214	+
14-3-3e	29	9201.04	+
Dlg	140	9189	+
p24	24	9177.6	+
HSF4	55	9155.03	+
b-Enolase/ENO-3	47	9134	+
c-erbB-2	185	9087.66	+
PNUTS	110	8996.8	-
trk B	145/95	8961	-
Doublecortin	41	8899.21	-
Phospholipase Cb1	150	8862.28	-
Ubch6	21	8602.69	-
hSlu7	80	8500.93	-
IRAK	100	8488.39	-
HIP1	116	8450.51	-
ASS	46	8408.74	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
CLIP-115	115	8350	-
LSP-1	52	8194.05	-

KAP	34	8178.56	-
CUL-2	76	8171.03	-
LAT	42	8099	-
p45/SUG1	45	8033.72	-
SRP54	54	7923.18	-
Prenylcysteine Lyase	58	7880.55	-
s3A	22	7832.76	-
Tim44	44	7779.02	-
RPTPb	250	7736.4	-
Cathepsin D	43/28	7727.67	-
CSN2/hAlien	50	7690.62	-
Ubc9	18	7633	-
PKBa/Akt	59	7616	-
Mena	140/88/80	7548	-
PKCi	74	7531.33	-
NAT1	100	7524	-
Integrin b4	200	7489.63	-
ERP	45	7456.35	-
Syntaxin 6	31	7442.21	-
Nek3	56	7439.74	-
K+ Channel a	125	7389.29	-
a-Synuclein	19	7387	-
HDAC3	50	7387	-
IKKb	87	7367	-
IKAP	150	7278	-
Cyclin B	62	7219.93	-
p38 (pT180/pY182) Phospho-Specific	42	7182.64	-
L-Caldesmon	80	7160.78	-
Cdk2	33	7137.29	-
NMT-1	49-68	7135	-
Hsp10	10	7075.47	-
YAP	74	6950	-
Ceruloplasmin	150	6931.69	-
HDJ-2	45	6818.26	-
panMunc13	196	6604.67	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
RNase HI	36	6585.19	-
Glucocorticoid Receptor	94	6570	-
PKCi	74	6438.41	-
ApoB-100	540	6356.04	-
HNF-1b	51	6257.92	-
p62 Ick ligand	62	6239.38	-

IRS-1	180	6220.44	-
MUPP1	219	6181	-
Bet1	18	6150.15	-
Rabaptin-5	117	6144.24	-
Disabled-2/p96	96	6140.18	-
EFP	71	6129	-
Neuropilin-2	104	6116.77	-
SPA-1	130	6107.06	-
CDC27	97	6103.66	-
erg2	130	6062.24	-
Serine Racemase	38	5925.92	-
Nm23	17	5884.69	-
JBP1/Skb1Hs	72	5852	-
Tubby	64	5826.72	-
AKAP121/S-AKAP84	121/84	5806	-
Neurexin IV/Caspr1	190	5693.47	-
JNK (pT183/pY185) Phospho-Specific	43/56	5632.3	-
SLP-2	44	5611.53	-
p53	53	5610.68	-
MTP	97	5590.48	-
Pericentrin	220	5590.02	-
Coilin	80	5587.2	-
Fibronectin	240	5574.67	-
PKAR1a	49	5512	-
BAF47	47	5501	-
iNOS/NOS Type II	130	5473.63	-
P-Cadherin	120	5450.01	-
hHR23B	58	5389.63	-
Cdc2 (pY15), Phospho-Specific	34	5365.13	-
Xin	182	5361.87	-
Cyclin D2	35	5331.02	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
CD38	46	5328.66	-
DNA Topo I	100	5317.3	-
DP103/Gemin3	103	5290.55	-
GCF2	160	5220.12	-
GSPT2	88/90	5212.5	-
MKBP	22	5207.24	-
XPA	34	5205.18	-
Integrin α 3/VLA-3a	135	5198	-
Na ⁺ ,K ⁺ ATPase b3	42	5178.52	-
NIPP-1	45	5162.33	-

No55	55	5147.56	-
SHIP-1/p150Ship	150	5117.49	-
Prostasin	40	5085.25	-
Lamp-1	110	5070.19	-
Heparanase	72	5054.19	-
M-Cadherin	130	5023.54	-
Cofilin	19	4999	-
EGF Receptor	180	4994.39	-
Stat5 (pY694), Phospho-Specific	92	4991.69	-
PTRF	60	4983.83	-
Integrin b1	130	4978.83	-
bPIX	78	4903.64	-
Neurexin I	165	4891.61	-
FADD	24	4829.64	-
Integrin av/CD51/VNRA	125	4829	-
MSH2	102	4765.8	-
Tim23	23	4753.92	-
Katanin p80	80	4724.01	-
GRASP55	55	4723.37	-
eEF-2 Kinase	100	4703.88	-
CGBP	88	4696.46	-
Calsequestrin	55	4673.5	-
SP1	95/105	4669.49	-
EPLIN	90/110	4623	-
FKBP65	72/68	4622.85	-
E-Cadherin	120	4613.53	-
LEDGF	52/75	4613	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
Ezrin	80	4604.37	-
PPEF-2 long form	97	4571.74	-
CD3 zeta	180/32	4567.7	-
Calretinin	29	4502	-
Caspase-6	35/11	4497.62	-
Dok1/p62dok	62	4440.37	-
Btf	150	4406.11	-
hCNK1	100/79	4390.61	-
S100L/A	10	4371.08	-
SRPK1	92	4333	-
Nicastrin	110	4332.88	-
TMS1	22	4317.24	-
hcKrox	75	4305.18	-
Sam68	68	4273.43	-

GS27	27	4263.12	-
Melusin	38	4261.43	-
PDGF Receptor b	180	4257.51	-
SHC	66/52/46	4208.93	-
GIT1	95	4173.44	-
gp91phox	58	4163	-
Caspase-6	35/11	4162.58	-
HRF	23	4152	-
V-1/myotrophin	11	4125.12	-
PRK2	140	4074.9	-
Syntaxin 11	40	4069.25	-
GPI-Phospholipase D	110	4035.49	-
DFF45	45	4015.93	-
DNA Polymerase d	125	4013.81	-
erbB2	185	4007.49	-
Cathepsin D	43/28	4003.4	-
Brm	180	4002.17	-
Pleckstrin	47	3995.6	-
Roaz	190	3991	-
IGFBP-3	40/44	3978.03	-
CTCF	140	3930.75	-
MNK	190	3922.94	-
FHIT	17	3885.72	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
PEX19	38	3878.26	-
Fnk	70	3793.77	-
DNA Ligase III	103	3786.92	-
NRAGE	92	3756.03	-
ADAM9/MDC9	84	3755	-
S100P	11	3702.07	-
eNOS/NOS Type III	140	3701	-
PAF53	53	3667	-
Ku80	80	3662.83	-
Acetylcholinesterase	68	3653	-
CENP-H	33	3647.6	-
Cdk5	31	3624.94	-
TAFII70	72	3620.15	-
Btk	77	3607.78	-
p43/EMAP II precursor	43/21	3590.12	-
Smad4/DPC4	60	3574	-
FEN-1	50	3565.17	-
Caveolin 2	20	3538.82	-

DMPK	88	3506.39	-
RONa	40	3505.24	-
PBK	41	3502.07	-
Dynamin II	100	3485.29	-
ZRP-1/TRIP6	51	3470.42	-
Abl	145	3466.28	-
Pit-1	33	3466.27	-
Bid	23	3465.35	-
CAF-1 p150	150	3461.96	-
hILP/XIAP	57	3426.25	-
Ufd1L	40	3416.39	-
RIG-G	58	3415.73	-
AOX1	150	3406.17	-
p38a/SAPK2a	42	3400.74	-
Cyclin A	60	3389.13	-
FAK (pY397), Phospho-Specific	125	3388.41	-
PKR	58	3377.84	-
p70s6k	70	3358.23	-
Stat6	100	3341.66	-
Antigen Name	Mol Wt	Signal Intensity (Brain)	Reactivity (Brain)
GRIFIN	16	3304.62	-
CDC25B	63	3288.35	-
SCP3	34/37	3242.21	-
LITAF	24	3241.73	-
RECK	110	3212.39	-
Dok2/p56dok2	56	3212.39	-
APM	120	3195.81	-
OXA1Hs	42	3186	-
c-Kit	145	3182.25	-
Thrombospondin-1	190	3164.18	-
espin	110	3154.07	-
TRP-1	70	3145.47	-
MCM4	100	3137.81	-
Tensin	215	3093.53	-
MKP2	43	3087.13	-
HAP1	85/98	3082.21	-
AKAP82	82	3056.46	-
ERK1/2 (pT202/pY204) Phospho-Specific	44/42	3055	-
p160	160	3039.91	-
MST1	56	3038.17	-
ADNP	153	3034.26	-
ZAP70 Kinase	70	3015.37	-