

Proteomics of the mediodorsal thalamic nucleus in gastric ulcer induced by restraint-water-immersion-stress

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Table S1. The entire list of 2,853 proteins identified between the control and stressed groups

Protein				
NO	Protein name	Gene name	Accession No	LogRatio
1	Tubulin alpha-1A chain	Tuba1a	TBA1A_RAT	0.2320
2	Spectrin alpha chain, non-erythrocytic 1	Sptan1	A0A0G2JZ69_RAT	-0.0291
3	ATP synthase subunit alpha, mitochondrial	Atp5f1a	ATPA_RAT	-0.1155
4	Tubulin beta-2B chain	Tubb2b	TBB2B_RAT	0.0072
5	Actin, cytoplasmic 2	Actg1	ACTG_RAT	0.0001
6	Sodium/potassium-transporting ATPase subunit alpha-2	Atp1a2	AT1A2_RAT	-0.0716
7	Spectrin beta chain	Sptbn1	A0A0G2K8W9_RAT	-0.1158
8	Clathrin heavy chain 1	Cltc	CLH1_RAT	0.0788
9	Dihydropyrimidinase-related protein 2	Dpysl2	DPYL2_RAT	-0.0696
10	Glyceraldehyde-3-phosphate dehydrogenase	Gapdh	G3P_RAT	-0.0687
11	Sodium/potassium-transporting ATPase subunit alpha-3	Atp1a3	AT1A3_RAT	0.0391
12	ATP synthase subunit beta, mitochondrial	Atp5f1b	ATPB_RAT	0.1772
13	Cytoplasmic dynein 1 heavy chain 1	Dync1h1	M0R9X8_RAT	0.0527
14	Myelin basic protein transcript variant N	Mbp	I7EFB0_RAT	0.0696
15	Microtubule-associated protein	Map2	F1LNK0_RAT	-0.1053
16	Pyruvate kinase PKM	Pkm	KPYM_RAT	-0.2608
17			D3ZQQ5_RAT	0.0087

18	Plectin	Plec	F7F9U6_RAT	-0.0076
19	14-3-3 protein zeta/delta	Ywhaz	A0A0G2JV65_RAT	-0.2431
20	2',3'-cyclic-nucleotide 3'-phosphodiesterase	Cnp	CN37_RAT	-0.0495
21	Creatine kinase B-type	Ckb	KCRB_RAT	-0.0514
22	Voltage-dependent anion-selective channel protein 1	Vdac1	VDAC1_RAT	-0.0555
23	Microtubule-associated protein 1A	Map1a	A0A0G2K5C6_RAT	-0.0820
24	Syntaxin-binding protein 1	Stxbp1	STXB1_RAT	0.0195
25	Fructose-bisphosphate aldolase A	Aldoa	ALDOA_RAT	0.0215
26	Microtubule-associated protein 1B	Map1b	F1LRL9_RAT	-0.0314
27	Heat shock cognate 71 kDa protein	Hspa8	HSP7C_RAT	0.0169
28	Brain acid soluble protein 1	Basp1	BASP1_RAT	-0.0244
29	Spectrin beta chain	Sptbn2	F1MA36_RAT	0.0769
30	60 kDa heat shock protein, mitochondrial	Hspd1	CH60_RAT	0.0370
31	N-ethylmaleimide sensitive fusion protein, isoform CRA_b	Nsf	F1LQ81_RAT	0.0825
32	Alpha-enolase	Eno1	ENOA_RAT	-0.0552
33	14-3-3 protein epsilon	Ywhae	1433E_RAT	0.1247
34	Calcium/calmodulin-dependent protein kinase type II subunit alpha	Camk2a	KCC2A_RAT	-0.1218
35	Synapsin-1	Syn1	SYN1_RAT	-0.0812
36	Hexokinase-1	Hk1	HXK1_RAT	-0.0871
37	Guanine nucleotide-binding protein G(o) subunit alpha	Gnao1	GNAO_RAT	-0.1482
38	Neural cell adhesion molecule 1	Ncam1	A0A0G2K0M8_RAT	0.0478
39	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	Gnb1	GBB1_RAT	-0.2016

40	V-type proton ATPase subunit B, brain isoform	Atp6v1b2	VATB2_RAT	-0.1543
41	Glial fibrillary acidic protein	Gfap	GFAP_RAT	-0.1506
42	ATPase H ⁺ -transporting V1 subunit A	Atp6v1a	D4A133_RAT	-0.0190
43	Aconitate hydratase, mitochondrial	Aco2	ACON_RAT	0.0734
44	Alpha-internexin	Ina	AINX_RAT	-0.0576
45	Heat shock protein HSP 90-beta	Hsp90ab1	HS90B_RAT	-0.1009
46	Protein bassoon	Bsn	G3V984_RAT	-0.0573
47	Myosin, heavy polypeptide 10, non-muscle, isoform CRA_b	Myh10	G3V9Y1_RAT	0.1145
48	unknow		MDHM_RAT	0.0667
49	Contactin-1	Cntn1	CNTN1_RAT	0.0123
50	Sodium/potassium-transporting ATPase subunit alpha-1	Atp1a1	AT1A1_RAT	0.0097
51	Neurofilament medium polypeptide	Nefm	NFM_RAT	0.0371
52	Glutamate dehydrogenase 1, mitochondrial	Glud1	DHE3_RAT	-0.0491
53	Neurofilament light polypeptide	Nefl	NFL_RAT	-0.0941
54	Plasma membrane calcium-transporting ATPase 2	Atp2b2	AT2B2_RAT	-0.4641
55	Gamma-enolase	Eno2	ENOG_RAT	0.0415
56	ADP/ATP translocase 1	Slc25a4	Q6P9Y4_RAT	0.2635
57	Tubulin beta-3 chain	Tubb3	TBB3_RAT	-0.2377
58	Septin 7	Sept7	A2VCW8_RAT	-0.2047
59	Tenascin R, isoform CRA_b	Tnr	A0A096MJE6_RAT	0.0224
60	Tubulin beta chain	Tubb4b	G3V7C6_RAT	0.0747
61	MICOS complex subunit MIC60	Immt	A0A0G2JVH4_RAT	-0.0225

62	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	Ndufs1	NDUS1_RAT	0.0574
63	Heat shock protein HSP 90-alpha	Hsp90aa1	HS90A_RAT	0.0089
64	Peptidyl-prolyl cis-trans isomerase A	Ppia	PPIA_RAT	-0.1881
65	Calmodulin-1, Calmodulin-2, Calmodulin-3	Calm1, Calm2, Calm3	CALM_RAT	-0.0460
66	Creatine kinase U-type, mitochondrial	Ckmt1	Q5BJT9_RAT	-0.2219
67	Aspartate aminotransferase, mitochondrial	Got2	AATM_RAT	-0.0362
68	Phosphoglycerate kinase 1	Pgk1	PGK1_RAT	0.0381
69	Malate dehydrogenase, cytoplasmic	Mdh1	MDHC_RAT	0.0133
70	Synaptosomal-associated protein 25	Snap25	SNP25_RAT	-0.0994
71	Synaptojanin-1	Synj1	D4ABN3_RAT	-0.1008
72	V-type proton ATPase subunit a	Atp6v0a1	Q2I6B2_RAT	-0.0968
73	Unconventional myosin-Va	Myo5a	A0A0G2K4Y7_RAT	-0.1030
74	AP-2 complex subunit beta	Ap2b1	AP2B1_RAT	-0.0143
75	Fructose-bisphosphate aldolase	Aldoc	A0A0G2K3Q6_RAT	-0.0781
76	Synapsin II, isoform CRA_a	Syn2	G3V733_RAT	-0.0810
77	Ras-related protein Rab-3A	Rab3a	RAB3A_RAT	-0.1890
78	Tropomyosin alpha-3 chain	Tpm3	TPM3_RAT	0.0417
79	Microtubule-associated protein 6	Map6	MAP6_RAT	-0.0345
80	Synaptotagmin-1	Syt1	SYT1_RAT	-0.0282
81	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	Atp2a2	AT2A2_RAT	0.0252
82	Transitional endoplasmic reticulum ATPase	Vcp	TERA_RAT	-0.0338
83	14-3-3 protein gamma	Ywhag	1433G_RAT	-0.0111

84	AP-2 complex subunit alpha	Ap2a2	Q66HM2_RAT	-0.0281
85	Sodium/potassium-transporting ATPase subunit beta-1	Atp1b1	AT1B1_RAT	0.2032
86	Plasma membrane calcium-transporting ATPase 1	Atp2b1	AT2B1_RAT	-0.0698
87	ATP-dependent 6-phosphofructokinase	Pfkp	C7C5T2_RAT	-0.0443
88	Myelin proteolipid protein	Plp1	MYPR_RAT	0.0889
89	ATP synthase subunit gamma, mitochondrial	Atp5f1c	ATPG_RAT	0.2049
90	L-lactate dehydrogenase	Ldha	B5DEN4_RAT	0.1818
91	Neurofilament heavy polypeptide	Nefh	F1LRZ7_RAT	-0.0026
92	Protein kinase C and casein kinase substrate in neurons protein 1	Paccin1	PACN1_RAT	-0.0342
93	SRC kinase signaling inhibitor 1	Srcin1	SRCN1_RAT	-0.0188
94	Syntaxin-1B	Stx1b	STX1B_RAT	-0.1835
95	Voltage-dependent anion-selective channel protein 2	Vdac2	VDAC2_RAT	-0.0100
96	Heat shock 70 kDa protein 4	Hspa4	HSP74_RAT	0.0533
97	Citrate synthase	Cs	G3V936_RAT	0.1919
98	ATP-dependent 6-phosphofructokinase	Pfkm	Q52KS1_RAT	0.0758
99	Alpha-actinin-4	Actn4	ACTN4_RAT	0.6575
100	AP-2 complex subunit mu	Ap2m1	AP2M1_RAT	-0.0332
101	unknow		F1LQ05_RAT	-0.0933
102	Septin 5, isoform CRA_d	5-Sep	D3ZDH8_RAT	-0.0652
103	Aspartate aminotransferase, cytoplasmic	Got1	AATC_RAT	-0.1093
104	Rab GDP dissociation inhibitor alpha	Gdi1	GDIA_RAT	-0.0480
105	Neuromodulin	Gap43	NEUM_RAT	0.0509

106	Microtubule-actin cross-linking factor 1	Macf1	A0A0G2JWA8_RAT	0.0691
107	Stress-70 protein, mitochondrial	Hspa9	F1M953_RAT	-0.0383
108	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform	Ppp3ca	PP2BA_RAT	-0.0203
109	14-3-3 protein eta	Ywhah	1433F_RAT	-0.0322
110	Erythrocyte membrane protein band 4.1-like 3	Epb41l3	A0A0G2K1Q9_RAT	0.2183
111	Excitatory amino acid transporter 2	Slc1a2	EAA2_RAT	0.0408
112	Triosephosphate isomerase	Tpi1	TPIS_RAT	0.0778
113	Myc box-dependent-interacting protein 1	Bin1	BIN1_RAT	0.1652
114	Calcium/calmodulin-dependent protein kinase II, beta, isoform CRA_c	Camk2b	F1LUE2_RAT	-0.0742
115	Neurofascin	Nfasc	D3ZW56_RAT	-0.0460
116	Cytochrome b-c1 complex subunit 2, mitochondrial	Uqcrc2	QCR2_RAT	0.2040
117	Globin c3	Hba-a1	B1H216_RAT	-0.0147
118	Succinate--CoA ligase [ADP-forming] subunit beta, mitochondrial	Sucla2	F1LM47_RAT	0.1172
119	Solute carrier family 25 member 12	Slc25a12	F1LX07_RAT	0.0586
120	Histone H2B	Hist1h2bl	M0R4L7_RAT	0.0720
121	Glutamine synthetase	Glul	GLNA_RAT	0.0101
122	Endoplasmic reticulum chaperone BiP	Hspa5	GRP78_RAT	0.0130
123	Cofilin-1	Cfl1	COF1_RAT	-0.1084
124	Ras-related protein Rab-1A	Rab1A	RAB1A_RAT	-0.0885
125	Pyruvate dehydrogenase E1 component subunit alpha	Pdha1	A0A0G2JW90_RAT	-0.0133
126	Elongation factor 2	Eef2	EF2_RAT	-0.1445
127	Brevican core protein	Bcan	G3V8G4_RAT	0.0284

128	Protein piccolo	Pclo	PCLO_RAT	-0.0399
129	Protein phosphatase 2 (Formerly 2A), regulatory subunit A (PR 65), alpha isoform, isoform CRA_a	Ppp2r1a	Q5XI34_RAT	-0.0872
130	Cytochrome b-c1 complex subunit 1, mitochondrial	Uqcrc1	QCR1_RAT	0.0482
131	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	Pdhb	A0A0G2KAM3_RAT	-0.0721
132	Dihydrolipoyl dehydrogenase, mitochondrial	Dld	DLDH_RAT	-0.0245
133	Phosphoglycerate mutase 1	Pgam1	PGAM1_RAT	0.0578
134	Isocitrate dehydrogenase [NAD] subunit, mitochondrial	Idh3a	F1LNF7_RAT	0.0876
135	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	Dlat	ODP2_RAT	0.1395
136	Synaptic vesicle glycoprotein 2A	Sv2a	SV2A_RAT	-0.1210
137	Heat shock 70kDa protein 12A (Predicted), isoform CRA_a	Hspa12a	D3ZC55_RAT	0.0027
138	Glucose-6-phosphate isomerase	Gpi	G6PI_RAT	0.2650
139	Ras/Rap GTPase-activating protein SynGAP	Syngap1	SYGP1_RAT	0.0101
140	Vimentin	Vim	VIME_RAT	-0.1575
141	Dihydropyrimidinase-related protein 5	Dpysl5	DPYL5_RAT	-0.0912
142	Alpha-1,4 glucan phosphorylase	Pygb	G3V6Y6_RAT	0.2418
143	unknow		D3ZH00_RAT	-0.0866
144	Dynactin 1, isoform CRA_a	Dctn1	D4A8U7_RAT	0.0547
145	Dihydropyrimidinase-related protein 1	Crmp1	DPYL1_RAT	0.0707
146	Aldehyde dehydrogenase family 5, subfamily A1	Aldh5a1	G3V945_RAT	-0.1428

147	14-3-3 protein theta	Ywhaq	I433T_RAT	-0.0390
148	Sodium/calcium exchanger 2	Slc8a2	A0A0G2JZK7_RAT	-0.0928
149	Microtubule-associated protein	Mapt	D4A1Q2_RAT	-0.1048
150	Reticulon	Rtn4	F1LQN3_RAT	0.0424
151	Fatty acid synthase	Fasn	FAS_RAT	0.0254
152	Pyruvate carboxylase, mitochondrial	Pc	A0A0G2JTL5_RAT	0.0004
153	Tubulin polymerization-promoting protein	Tppp	A0A0G2K2D6_RAT	0.0263
154	Dynamin-1-like protein	Dnm1l	DNM1L_RAT	-0.1469
155	Dynamin-like 120 kDa protein, mitochondrial	Opa1	OPA1_RAT	0.0235
156	L-lactate dehydrogenase B chain	Ldhd	LDHB_RAT	-0.0129
157	Heterogeneous nuclear ribonucleoproteins A2/B1	Hnrnpa2b1	F1LNF1_RAT	0.0128
158	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	Sdha	SDHA_RAT	0.0043
159	Phosphate carrier protein, mitochondrial	Slc25a3	G3V741_RAT	0.1267
160	Septin 6	Setp6	A0A0U1RRT8_RAT	-0.1140
161	Guanine deaminase	Gda	Q9JKB7_RAT	-0.1362
162	NAD-dependent protein deacetylase	Sirt2	A0A0G2JWM2_RAT	0.1065
163	Protein disulfide-isomerase	Pdia3	A0A0H2UHM5_RAT	-0.0728
164	Cytochrome b-c1 complex subunit Rieske, mitochondrial	Uqcrrf1	UCRI_RAT	0.0181
165	Beta-soluble NSF attachment protein	Napb	F8WFM2_RAT	0.1353
166	V-type proton ATPase subunit	Atp6v0d1	Q5M7T6_RAT	0.0323
167	ATPase, H ⁺ transporting, V1 subunit E isoform 1, isoform CRA_a	Atp6v1e1	G3V7L8_RAT	-0.1729
168	Prohibitin-2	Phb2	PHB2_RAT	0.0049

169	Prohibitin	Phb	PHB_RAT	-0.1061
170	Ubiquitin carboxyl-terminal hydrolase isozyme L1	Uchl1	UCHL1_RAT	0.0208
171	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial	Cox4i1	COX4I1_RAT	0.1576
172	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial	Ndufv1	Q5XIH3_RAT	-0.0063
173	T-complex protein 1 subunit beta	Cct2	TCPB_RAT	-0.1105
174	Elongation factor 1-alpha 2	Eef1a2	EF1A2_RAT	0.2749
175	Dmx-like 2	Dmxl2	F1M3W5_RAT	-0.0018
176	Syntaxin-1A	Stx1a	STX1A_RAT	-0.0461
177	Tubulin alpha-4A chain	Tuba4a	TBA4A_RAT	-0.1709
178	Drebrin	Dbn1	A0A0H2UHL9_RAT	-0.1074
179	Protein kinase C	Prkcb	F1LS42_RAT	-0.1489
180	Myosin, heavy polypeptide 9, non-muscle	Myh9	G3V6P7_RAT	0.0768
181	Alpha-synuclein	Snca	SYUA_RAT	0.1708
182	Serum albumin	Alb	ALBU_RAT	-0.3014
183	Adducin 1 (Alpha), isoform CRA_b	Add1	A0A0G2JSM7_RAT	0.0512
184	Calreticulin	Calr	CALR_RAT	0.0945
185	4-aminobutyrate aminotransferase, mitochondrial	Abat	GABT_RAT	0.1384
186	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2	Gnb2	GBB2_RAT	-0.1764
187	Solute carrier family 12 member 5	Slc12a5	S12A5_RAT	0.0778
188	T-complex protein 1 subunit epsilon	Cct5	TCPE_RAT	-0.0206
189	Histone H3	Hist2h3c2	D3ZJ08_RAT	-0.4424
190	Dihydropyrimidinase-related protein 3	Dpysl3	DPYL3_RAT	-0.0537

191	Voltage-dependent anion-selective channel protein 3	Vdac3	VDAC3_RAT	0.2122
192	Neural cell adhesion molecule 2	Ncam2	A0A0G2K7P9_RAT	-0.1151
193	Histone H4	Hist1h4b	H4_RAT	0.3467
194	2-oxoglutarate dehydrogenase, mitochondrial	Ogdh	ODO1_RAT	-0.1451
195	Ubiquitin-like modifier-activating enzyme 1	Uba1	UBA1_RAT	-0.1367
196	unknow		D3ZDF0_RAT	-0.0743
197	Guanine nucleotide-binding protein G(i) subunit alpha-2	Gnai2	GNAI2_RAT	-0.0633
198	Heterogeneous nuclear ribonucleoprotein K	Hnrnpk	Q5D059_RAT	0.0012
199	Vesicle associated membrane protein 2B	vamp2	Q9WUW2_RAT	-0.2943
200	S-adenosylhomocysteine hydrolase-like protein 1	Ahcyl1	SAHH2_RAT	0.1493
201	Clathrin coat assembly protein AP180	Snap91	A0A0G2K0B6_RAT	-0.0473
202	Liprin-alpha-3	Ppfia3	LIPA3_RAT	0.0016
203	Synaptophysin	Syp	SYPH_RAT	-0.1218
204	Acetyl-CoA acetyltransferase, mitochondrial	Acat1	THIL_RAT	0.0600
205	Tropomodulin-2	Tmod2	TMOD2_RAT	-0.0884
206	ADP-ribosylation factor 1	Arf1	ARF1_RAT	0.5038
207	Profilin	Pfn2	D3ZDU5_RAT	-0.1315
208	Disks large homolog 4	Dlg4	DLG4_RAT	0.0208
209	Trifunctional enzyme subunit alpha, mitochondrial	Hadha	ECHA_RAT	0.0971
210	Lamin A, isoform CRA_b	Lmna	G3V8L3_RAT	-0.1096
211	cAMP-dependent protein kinase type II-beta regulatory subunit	Prkar2b	KAP3_RAT	-0.0801
212	Succinyl-CoA:3-ketoacid coenzyme A	Oxct1	SCOT1_RAT	0.0123

	transferase 1, mitochondrial			
213	T-complex protein 1 subunit alpha	Tcp1	TCPA_RAT	0.0943
214	Thy-1 membrane glycoprotein	Thy1	THY1_RAT	-0.0047
215	Globin a4	Hbb	A0A0G2JSW3_RAT	0.0114
216	Band 4.1-like protein 1-like	Epb4111	A0A0G2K0F3_RAT	-0.0369
217	Beta-adducin	Add2	ADDB_RAT	-0.0099
218	ATP synthase F(0) complex subunit B1, mitochondrial	Atp5f1	AT5F1_RAT	0.2526
219	Elongation factor Tu, mitochondrial	Tufm	EFTU_RAT	0.0887
220	Histone H1.4	Hist1h1e	H14_RAT	-0.1501
221	ATP-citrate synthase	Acly	A0A0G2K5E7_RAT	0.0310
222	Tubulin beta chain	Tubb4a	B4F7C2_RAT	-0.0857
223	Talin 2	Tln2	D3ZA84_RAT	0.0231
224	Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial	Idh3B	IDH3B_RAT	0.0149
225	Limbic system-associated membrane protein	Lsamp	LSAMP_RAT	-0.0728
226	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	Ndufs2	NDUS2_RAT	0.2207
227	T-complex protein 1 subunit delta	Cct4	TCPD_RAT	0.0359
228	Mitochondrial import receptor subunit TOM70	Tomm70	TOM70_RAT	0.0345
229	Voltage-dependent calcium channel subunit alpha-2/delta-1	Cacna2d1	D3ZKP9_RAT	-0.0439
230	Dihydropyrimidinase-related protein 4	Dpysl4	DPYL4_RAT	-0.0950
231	Transcriptional activator protein Pur-alpha	Pura	F1LPS8_RAT	0.0693
232	Heat shock protein 105 kDa	Hsph1	HS105_RAT	-0.2062
233	Heterogeneous nuclear ribonucleoprotein U	Hnrnpu	A0A0G2JZ52_RAT	-0.0474

234	Neural cell adhesion molecule L1	L1cam	A0A0G2KA95_RAT	0.0389
235	Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex), isoform CRA_a	Dlst	G3V6P2_RAT	-0.0186
236	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	Ndufa9	NDUA9_RAT	0.0869
237	Actn1 protein	Actn1	Q6GMN8_RAT	0.0492
238	Transketolase	Tkt	G3V826_RAT	-0.0953
239	Glutaminase kidney isoform, mitochondrial	Gls	GLSK_RAT	0.1238
240	Tubulin beta-5 chain	Tubb5	TBB5_RAT	-0.1426
241	Visinin-like protein 1	Vsnl1	VISL1_RAT	0.0597
242	Neuronal cell adhesion molecule	Nrcam	A0A0G2K3Q5_RAT	-0.0503
243	ATP synthase subunit O, mitochondrial	Atp5o	ATPO_RAT	0.1264
244	AP-2 complex subunit alpha	Ap2a1	D3ZUY8_RAT	-0.0655
245	Glutamate receptor 2	Gria2	F1LNE4_RAT	-0.2825
246	Nck-associated protein 1	Nckap1	NCKP1_RAT	0.0893
247	T-complex protein 1 subunit gamma	Cct3	TCPG_RAT	0.1286
248	WD repeat-containing protein 1	Wdr1	WDR1_RAT	-0.1116
249	4F2 cell-surface antigen heavy chain	Slc3a2	4F2_RAT	-0.1699
250	Cytochrome c oxidase subunit 2	COX2	A0A097PE04_RAT	0.2416
251	Heat shock 70kDa protein 4-like (Predicted), isoform CRA_b	Hspa4l	B4F772_RAT	0.0199
252	Amphiphysin	Amph	F1LPP0_RAT	0.1090
253	AP2-associated protein kinase 1	Aak1	F1LRI7_RAT	-0.1755
254	Neuronal membrane glycoprotein M6-a	Gpm6a	GPM6A_RAT	-0.1389
255	Neurochondrin	Ncdn	NCDN_RAT	-0.0151

256	14-3-3 protein beta/alpha	Ywhab	1433B_RAT	-0.0175
257	Endoplasmin	Hsp90b1	A0A0A0MY09_RAT	-0.0463
258	Ketimine reductase mu-crystallin	Crym	CRYM_RAT	-0.1686
259	Chaperonin-containing TCP1 subunit 7	Cct7	D4AC23_RAT	-0.0212
260	Aminopeptidase	Npepps	F1M9V7_RAT	0.0348
261	Ras-related C3 botulinum toxin substrate 1	Rac1	RAC1_RAT	-0.0334
262	10 kDa heat shock protein, mitochondrial	Hspe1	CH10_RAT	-0.0443
263	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial	Ndufa10	NDUAA_RAT	-0.0614
264	Peroxiredoxin 5, isoform CRA_c	Prdx5	A0A0G2JSS8_RAT	0.0734
265	Cytochrome c oxidase subunit 5B, mitochondrial	Cox5b	COX5B_RAT	-0.0889
266	unknow		D3ZI67_RAT	0.0257
267	Guanine nucleotide binding protein, alpha q polypeptide, isoform CRA_a	Gnaq	D4AE68_RAT	0.0269
268	Calcium-dependent secretion activator 1	Cadps	F1LLX6_RAT	-0.0263
269	Receptor-type tyrosine-protein phosphatase zeta	Ptprz1	F1LMY3_RAT	-0.0103
270	Transgelin-3	Tagln3	TAGL3_RAT	-0.0912
271	V-type proton ATPase subunit C 1	Atp6v1c1	VATC1_RAT	-0.0274
272	ATP synthase subunit d, mitochondrial	Atp5h	ATP5H_RAT	0.2155
273	Chaperonin subunit 8 (Theta) (Predicted), isoform CRA_a	Cct8	D4ACB8_RAT	-0.0263
274	Disks large homolog 2	Dlg2	DLG2_RAT	-0.1324
275	Neuronal-specific septin-3	Sept3	F1LMH0_RAT	-0.0785
276	Acyl-CoA thioesterase 7, isoform CRA_a	Acot7	F8WG67_RAT	-0.0269
277	Stathmin	Stmn1	STMN1_RAT	-0.2120

278	Malic enzyme	Me3	A0A0G2K4C6_RAT	-0.0629
		LOC100911		
279	RCG47744, isoform CRA_c	440	A0A0G2K5L2_RAT	-0.0676
280	Immunoglobulin superfamily, member 8	Igsf8	A0A140TAA1_RAT	-0.2470
281	Rabphilin-3A	Rph3a	F1LPB9_RAT	-0.1221
282	Phosphatidylethanolamine-binding protein 1	Pebp1	PEBP1_RAT	0.1832
	Chaperonin containing Tcp1, subunit 6A (Zeta 1)	Cct6a	Q3MHS9_RAT	0.0661
284	SH3 and multiple ankyrin repeat domains protein 3	Shank3	SHAN3_RAT	0.1212
285	Catenin (Cadherin associated protein), beta 1, isoform CRA_a	Ctnnb1	A0A0G2JT93_RAT	-0.1111
286	Calnexin	Canx	CALX_RAT	-0.1102
287	Cytochrome c, somatic	Cycs	CYC_RAT	0.2322
288	Erythrocyte membrane protein band 4.1-like 2	Epb41l2	D3ZAY7_RAT	0.1159
	NADH:ubiquinone oxidoreductase subunit B10	Ndufb10	D4A0T0_RAT	0.2294
290	NSF attachment protein gamma	Napg	A0A0G2K350_RAT	0.1819
291	Ubiquitin carboxyl-terminal hydrolase	Usp5	D3ZVQ0_RAT	0.0893
292	EF-hand domain-containing protein D2	Efhd2	EFHD2_RAT	-0.0043
293	Ras-related protein Rab-2A	Rab2a	F1LP82_RAT	-0.0239
294	Opioid-binding protein/cell adhesion molecule	Opcml	OPCM_RAT	-0.2094
295	Paralemmin-1	Palm	PALM_RAT	-0.0255
296	Pcbp2 protein	Pcbp2	Q4V8F6_RAT	-0.2967
297	V-type proton ATPase subunit G	Atp6v1g2	Q8R2H0_RAT	-0.1050
298	Dynactin subunit 2	Dctn2	A0A0G2JUC7_RAT	0.0955

299	Anion exchange protein	Slc4a4	A0A0H2UHB7_RAT	0.0514
300	CaM kinase-like vesicle-associated protein	Camkv	CAMKV_RAT	0.0786
301	Clathrin light chain B	Cltb	CLCB_RAT	-0.1351
302	PHD finger protein 24	Phf24	D3ZB78_RAT	-0.1100
303	Fascin	Fscn1	FSCN1_RAT	-0.1050
304	Adenylyl cyclase-associated protein 2	Cap2	CAP2_RAT	0.0442
305	Contactin-associated protein 1	Cntnap1	CNTP1_RAT	0.0477
306	Coiled-coil domain-containing 136	Ccdc136	D4AAR7_RAT	-0.0426
307	Methylglutaconyl-CoA hydratase, mitochondrial	Auh	F1LU71_RAT	0.0379
308	unknow		R9PXW7_RAT	-0.0428
309	Synaptic vesicle glycoprotein 2B	Sv2b	SV2B_RAT	-0.0193
310	Matrin-3	Matr3	A0A0G2JSR7_RAT	0.0441
311	Phosphodiesterase	Pde2a	A0A0G2K876_RAT	-0.2124
312	Long-chain-fatty-acid--CoA ligase 6	Acs16	ACSL6_RAT	-0.4569
313	Amine oxidase [flavin-containing] A	Maoa	AOFA_RAT	0.0853
314	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	Ddx5	B6DTP5_RAT	-0.1140
315	Cytochrome c oxidase subunit	Cox6b1	D3ZD09_RAT	0.0776
316	Intercellular adhesion molecule 5	Icam5	D4A435_RAT	0.0945
317	Flotillin-1	Flot1	FLOT1_RAT	0.0357
318	Fumarate hydratase, mitochondrial	Fh	FUMH_RAT	0.2088
319	Aldehyde dehydrogenase family 6, subfamily A1, isoform CRA_b	Aldh6a1	G3V7J0_RAT	-0.1142
320	LIM and SH3 domain protein 1	Lasp1	LASP1_RAT	-0.1010
321	Protein/nucleic acid deglycase DJ-1	Park7	PARK7_RAT	0.0425

322	Sideroflexin-3	Sfxn3	SFXN3_RAT	-0.1142
323	Peroxiredoxin-2	Prdx2	A0A0G2JSH9_RAT	-0.0095
324	Actin-related protein 3	Actr3	A0A0G2K1C0_RAT	-0.0760
325	V-type proton ATPase subunit H	Atp6v1h	A0A0G2K9J2_RAT	0.0702
326	LDL receptor-related protein 1	Lrp1	G3V928_RAT	-0.0814
327	Glycerol-3-phosphate dehydrogenase, mitochondrial	Gpd2	GPDM_RAT	-0.0111
328	Protein kinase C gamma type	Prkcg	KPCG_RAT	-0.0116
329	SET-binding factor 1	Sbf1	M0RAP5_RAT	-0.0767
330	Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform	Ppp2cb	PP2AB_RAT	0.0833
331	Superoxide dismutase [Cu-Zn]	N/A	Q6LDS4_RAT	0.0391
332	RCG23287, isoform CRA_a	Rps27a	Q6PED0_RAT	0.2344
333	Alanine--tRNA ligase, cytoplasmic	Aars	SYAC_RAT	0.0023
334	Actin, aortic smooth muscle	Acta2	A0A0G2K4M6_RAT	0.3875
335	Oxidation resistance protein 1	Oxr1	A0A0G2K7Y2_RAT	-0.0438
336	Succinate--CoA ligase [ADP/GDP-forming] subunit alpha, mitochondrial	Suclg1	A0A0H2UHE1_RAT	-0.0690
337	Homer protein homolog 1	Homer1	A0A0H2UI35_RAT	0.0322
338	Cytochrome c oxidase subunit 5A, mitochondrial	Cox5a	COX5A_RAT	0.2901
339	4-nitrophenylphosphatase domain and non-neuronal SNAP25-like protein homolog 1 (C. elegans), isoform CRA_b	Nipsnap1	G3V728_RAT	-0.0987
340	Rho GDP-dissociation inhibitor 1	Arhgdia	GDIR1_RAT	-0.0519
341	Adenylate kinase isoenzyme 1	Ak1	KAD1_RAT	0.0435
342	Nucleolin	Ncl	NUCL_RAT	0.0884

343	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-1	Plcb1	PLCB1_RAT	0.0900
344	Splicing factor proline/glutamine rich (Polypyrimidine tract binding protein associated)	Sfpq	Q4KM71_RAT	-0.0859
345	Transforming protein RhoA	Rhoa	RHOA_RAT	-0.0875
346	Tyrosine-protein phosphatase non-receptor type substrate 1	Sirpa	SHPS1_RAT	-0.0194
347	Amino acid transporter	Slc1a3	A0A0G2JSU1_RAT	-0.1082
348	Citron rho-interacting serine/threonine kinase	Cit	A0A0G2JWA9_RAT	-0.0951
349	Uncharacterized protein	N/A	A0A0G2K3Z9_RAT	0.1008
350	RAB14, member RAS oncogene family	Rab14	B0BMW0_RAT	-0.1601
351	RAS protein activator like 1 (GAP1 like) (Predicted)	Rasal1	D3ZHY9_RAT	-0.0398
352	NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 7 (Predicted)	Ndufb7	D3ZLT1_RAT	-0.0857
353	cAMP-dependent protein kinase type II-alpha regulatory subunit	Prkar2a	G3V8Q6_RAT	-0.2610
354	Heterogeneous nuclear ribonucleoprotein H2	Hnrnph2	HNRH2_RAT	-0.0800
355	Heterogeneous nuclear ribonucleoprotein L	Hnrnpl	HNRPL_RAT	-0.2149
356	Enhancer trap locus 4	Etl4	M0R5H1_RAT	-0.1032
357	Myelin-oligodendrocyte glycoprotein	Mog	MOG_RAT	-0.1741
358	Nicotinamide nucleotide transhydrogenase	Nnt	Q5BJZ3_RAT	-0.0448
359	Alpha-soluble NSF attachment protein	Napa	SNAA_RAT	0.0519
360	ATP synthase protein 8	ATP8	Q5UAJ5_RAT	-0.2021
361	Flotillin 2, isoform CRA_d	Flot2	A0A0G2JXA8_RAT	0.1090
362	F-actin-capping protein subunit beta	Capzb	A0A0G2JYB1_RAT	-0.0039

363	Synaptopodin	Synpo	A0A0H2UHQ9_RAT	0.0552
364	Alpha-actinin	Actr1a	ACTZ_RAT	0.3367
365	AP-3 complex subunit beta	Ap3b2	D4AE00_RAT	-0.0046
366	unknow		F1LMC3_RAT	-0.0468
367	SH3-containing GRB2-like protein 3-interacting protein 1	Sgip1	F1M1Y0_RAT	0.0131
368	Mitogen-activated protein kinase 1	Mapk1	MK01_RAT	0.1503
369	Ras-related protein Rab-7a	Rab7a	RAB7A_RAT	-0.0497
370	40S ribosomal protein S3a	Rps3a	RS3A_RAT	0.0310
371	Septin-9	Sept9	SEPT9_RAT	0.0273
372	NDUFA4, mitochondrial complex-associated	Ndufa4	B2RZD6_RAT	-0.1360
373	Adenylyl cyclase-associated protein 1	Cap1	CAP1_RAT	-0.1942
374	Leucine-rich repeat-containing protein 7	Lrrc7	F1M4K6_RAT	-0.0070
375	Mitochondrial proton/calcium exchanger protein	Letm1	LETM1_RAT	0.0847
376	ATPase H ⁺ -transporting V1 subunit D	Atp6v1d	Q6P503_RAT	0.1584
377	Reticulon-3	Rtn3	RTN3_RAT	-0.0524
378	AP-2 complex subunit sigma	Ap2s1	AP2S1_RAT	0.0117
379	Actin-related protein 2	Actr2	ARP2_RAT	0.1053
380	Phospholipid-transporting ATPase	Atp8a1	F1LUT4_RAT	0.0782
381	Lamin-B1	Lmnb1	G3V7U4_RAT	-0.0530
382	CAP-Gly domain-containing linker protein 2	CAP-Gly domain-contai ning linker protein 2	G3V949_RAT	0.1405
383	Calcium/calmodulin-dependent protein kinase type II subunit delta	Camk2d	KCC2D_RAT	-0.2756

384	Isocitrate dehydrogenase [NAD] subunit, mitochondrial	Idh3g	Q5XIJ3_RAT	0.0257
385	Ras-related protein Rap-1A	Rap1a	RAP1A_RAT	-0.0705
386	Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial	Sdhb	SDHB_RAT	0.2614
387	WD repeat-containing protein 7	Wdr7	WDR7_RAT	0.0830
388	Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex	Pdhx	A0A0G2JZH8_RAT	-0.0407
389	Regulating synaptic membrane exocytosis protein 1	Rims1	A0A0G2KAV8_RAT	-0.0674
390	ADP/ATP translocase 2	Slc25a5	ADT2_RAT	0.3285
391	C38 protein	Cend1	B7X6I3_RAT	0.1580
392	Cullin-associated NEDD8-dissociated protein 1	Cand1	CAND1_RAT	0.1313
393	CLIP-associating protein 2	Clasp2	CLAP2_RAT	-0.1950
394	MAGUK p55 subfamily member 2	Mpp2	D3ZAA9_RAT	0.0324
395	Cytochrome c-1	Cyc1	D3ZFQ8_RAT	-0.1620
396	Alpha-1,4 glucan phosphorylase	Pygm	G3V8V3_RAT	0.0869
397	Myelin-associated glycoprotein	Mag	G3V9B3_RAT	-0.2079
398	Protein RUFY3	Rufy3	RUFY3_RAT	-0.0547
399	Beta-synuclein	Snca	A0A0G2JSQ1_RAT	0.2010
400	DnaJ heat shock protein family (Hsp40) member C6	Dnajc6	A0A0G2JY26_RAT	-0.0707
401	Early endosome antigen 1	Eea1	A0A0G2K051_RAT	0.1108
402	Dual-specificity mitogen-activated protein kinase kinase 1	Map2k1	A0A0H2UHI2_RAT	-0.0812
403	Coronin-1A	Coro1a	COR1A_RAT	-0.1680

404	Caskin-1	Caskin1	CSKI1_RAT	-0.1169
405	Versican core protein	Vcan	CSPG2_RAT	0.0341
406	Dystonin	Dst	D3ZC56_RAT	-0.0198
407	NADH dehydrogenase (Ubiquinone) Fe-S protein 3 (Predicted), isoform CRA_c	Ndufs3	D3ZG43_RAT	-0.0574
408	Aldehyde dehydrogenase, mitochondrial	Aldh2	F1LN88_RAT	-0.1101
409	Rab GDP dissociation inhibitor beta	Gdi2	GDIB_RAT	0.0428
410	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial	Ndufv2	NDUV2_RAT	-0.0539
411	Polyadenylate-binding protein 1	Pabpc1	PABP1_RAT	-0.0731
412	Septin 6 (Predicted), isoform CRA_b	Sept11	A0A0G2JUL7_RAT	-0.1260
413	Clathrin light chain	Clta	A0A0G2JYW3_RAT	-0.2134
414	Glutathione S-transferase pi	Gstp1	B6DYQ7_RAT	0.0232
415	Cell adhesion molecule 4	Cadm4	CADM4_RAT	-0.0001
416	ERC protein 2	Erc2	ERC2_RAT	0.1546
417	Non-specific lipid-transfer protein	Scp2	F1LQ55_RAT	0.0488
418	Heterogeneous nuclear ribonucleoprotein M	Hnrnpm	F1LV13_RAT	-0.0399
419	Kinesin-like protein KIF2A	Kif2a	KIF2A_RAT	0.0248
420	Neurocan core protein	Ncan	NCAN_RAT	-0.1374
421	ProSAAS	Pcsk1n	PCSK1_RAT	-0.2300
422	LanC lantibiotic synthetase component C-like 2 (Bacterial)	Lancl2	Q68FQ9_RAT	-0.0366
423	Annexin	Anxa6	Q6IMZ3_RAT	-0.0337
424	Sideroflexin-1	Sfxn1	SFXN1_RAT	0.0925
425	Cytoplasmic FMR1-interacting protein 2	Cyfp2	A0A0G2JT63_RAT	-0.1690
426	Septin-8	Sept8	A0A0G2K7G7_RAT	-0.0403

	NADH:ubiquinone oxidoreductase subunit			
427	A13	Ndufa13	D3ZE15_RAT	-0.1407
428	Dihydropteridine reductase	Qdpr	DHPR_RAT	0.0339
429	Dipeptidyl aminopeptidase-like protein 6	Dpp6	DPP6_RAT	0.0848
430	Histone H2A type 1-C	N/A	H2A1C_RAT	-0.0374
431	Isocitrate dehydrogenase [NADP], mitochondrial	Idh2	IDHP_RAT	0.0773
432	Serine/threonine-protein phosphatase 2B catalytic subunit beta isoform	Ppp3cb	PP2BB_RAT	-0.1442
433	Ras-related protein Rab-11B	Rab11b	RB11B_RAT	-0.1531
434	Heterogeneous nuclear ribonucleoprotein A3	Hnrnpa3	ROA3_RAT	-0.0127
435	Sodium- and chloride-dependent GABA transporter 3	Slc6a11	S6A11_RAT	-0.0165
436	Vesicle-associated membrane protein-associated protein A	Vapa	VAPA_RAT	-0.1694
437	Synaptic vesicle membrane protein VAT-1 homolog	Vat1	VAT1_RAT	-0.0426
438	Cell division control protein 42 homolog	Cdc42	A0A0G2JSM8_RAT	-0.3280
439	RAB6B, member RAS oncogene family	Rab6b	A0A0G2JT78_RAT	0.0148
440	Serine/threonine-protein kinase DCLK1	Dclk1	A0A0G2KB92_RAT	0.2052
441	Ankyrin-3	Ank3	ANK3_RAT	0.0688
442	Gelsolin	Gsn	GELS_RAT	0.0132
443	Septin-2	Sept2	SEPT2_RAT	0.1045
444	Septin 4	Sept4	A0A096MJN4_RAT	-0.1605
445	Rho-associated protein kinase	Rock2	A0A0G2K5N6_RAT	-0.1475
446	Calretinin	Calb2	CALB2_RAT	0.2519
447	F-actin-capping protein subunit alpha-2	Capza2	CAZA2_RAT	-0.0225

	CDGSH iron-sulfur domain-containing			
448	protein 1	Cisd1	CISD1_RAT	0.2288
449	Dynamin-3	Dnm3	DYN3_RAT	0.2317
	Fumarylacetoacetate hydrolase			
450	domain-containing protein 2	Fahd2	FAHD2_RAT	0.0190
451	Ribose-phosphate pyrophosphokinase 1	Prps1	PRPS1_RAT	0.1296
452	40S ribosomal protein S3	Rps3	RS3_RAT	0.0914
453	Sideroflexin-5	Sfxn5	SFXN5_RAT	0.1503
	N-myc downstream regulated gene 2, isoform			
454	CRA_a	Ndrp2	A0A0G2JSV0_RAT	0.0261
455	Myosin XVIIIa	Myo18a	A0A0G2JY08_RAT	-0.0891
456	C-terminal-binding protein 1	Ctbp1	A0A0H2UI20_RAT	-0.0917
457	Long-chain-fatty-acid--CoA ligase ACSBG1	Acsbg1	ACBG1_RAT	0.1388
458	Cytosol aminopeptidase	Lap3	AMPL_RAT	0.0677
459	Cytoplasmic dynein 1 intermediate chain 1	Dync1i1	DC1I1_RAT	-0.0182
460	Elongation factor 1-gamma	Eef1g	EF1G_RAT	0.0141
461	Kinesin-like protein	Kif5c	G3V6L4_RAT	-0.0667
462	ATP synthase subunit delta, mitochondrial	Atp5f1d	G3V7Y3_RAT	-0.0903
463	Glutathione S-transferase Yb-3	Gstm3	GSTM4_RAT	0.3437
464	Copine 6 protein	Cpne6	H1UBM5_RAT	-0.0970
	cAMP-dependent protein kinase type I-alpha			
465	regulatory subunit	Prkar1a	KAP0_RAT	-0.1499
466	Protein tyrosine phosphatase, receptor type, D	Ptpn22	M0RB22_RAT	-0.2343
467	Serine/threonine-protein kinase MRCK beta	Cdc42bpb	MRCKB_RAT	-0.0280
468	unkown		R9PXZ4_RAT	-0.0906
	SH3 and multiple ankyrin repeat domains			
469	protein 1	Shank1	SHAN1_RAT	-0.1312

470	Endophilin-B2	Sh3glb2	SHLB2_RAT	0.0194
471	Protein S100-B	S100b	S100B_RAT	-0.1033
472	Cell adhesion molecule 2	Cadm2	A0A0A0MY16_RAT	-0.0911
473	Solute carrier family 2 (Facilitated glucose transporter), member 3	Slc2a3	A0A0G2JSJ3_RAT	-0.2060
474	Inositol 1,4,5-trisphosphate receptor type 1	Itpr1	C7E1V2_RAT	-0.2272
475	Hepatocyte cell adhesion molecule	Hepacam	D3ZEI4_RAT	0.0831
476	ALG2, alpha-1,3/1,6-mannosyltransferase	Alg2	G3V6U3_RAT	-0.1205
477	Hyaluronan and proteoglycan link protein 1	Hapln1	HPLN1_RAT	-0.0106
478	Leucine-rich glioma-inactivated protein 1	Lgi1	LGI1_RAT	-0.0990
479	Platelet-activating factor acetylhydrolase IB subunit alpha	Pafah1b1	LIS1_RAT	0.1919
480	Peroxiredoxin-6	Prdx6	PRDX6_RAT	-0.0107
481	Actin-related protein 2/3 complex subunit 1A	Arpc1a	ARC1A_RAT	-0.0962
482	Complement component 1 Q subcomponent-binding protein, mitochondrial	C1qbp	C1QBP_RAT	0.1939
483	CD166 antigen	Alcam	CD166_RAT	0.1153
484	Drebrin-like protein	Dbnl	DBNL_RAT	-0.1619
485	N(G),N(G)-dimethylarginine dimethylaminohydrolase 1	Ddah1	DDAH1_RAT	0.0423
486	Dynein light chain 1, cytoplasmic	Dynll1	DYL1_RAT	-0.0143
487	Catenin delta-2	Ctnnd2	F1M787_RAT	-0.0836
488	Mitochondrial 2-oxoglutarate/malate carrier protein	Slc25a11	G3V6H5_RAT	0.0328
489	Guanine nucleotide-binding protein G(z) subunit alpha	Gnaz	GNAZ_RAT	0.0089
490	Neurabin-1	Ppp1r9a	NEB1_RAT	-0.1315

491	Protein disulfide-isomerase	P4hb	PDIA1_RAT	0.0382
492	Eukaryotic translation initiation factor 4A1	Elf4a1	Q6P3V8_RAT	-0.0100
493	Chromodomain helicase DNA-binding protein 4	Chd4	E9PU01_RAT	0.3252
494	Probable G-protein-coupled receptor 158	Gpr158	A0A0A0MY13_RAT	-0.0885
495	RAP1, GTP-GDP dissociation stimulator 1 (Predicted), isoform CRA_a	Rap1gds1	A0A0G2K1D2_RAT	0.0071
496	Peripheral plasma membrane protein CASK-like	LOC100910506	A0A0G2K2L8_RAT	0.0369
497	AP complex subunit beta	Ap1b1	A0A0G2K2V2_RAT	0.0512
498	Calcium-transporting ATPase	Atp2b3	A0A0G2K9Q6_RAT	0.0562
499	Serotransferrin	Tf	A0A0G2QC06_RAT	0.0307
500	Protein phosphatase 1, regulatory subunit 9B	Ppp1r9b	B1H262_RAT	-0.0329
501	Ganglioside-induced differentiation-associated-protein 1	Gdap1	D4A5X7_RAT	0.0747
502	Laminin subunit beta-2	Lamb2	LAMB2_RAT	-0.0083
503	Neurexin-1	Nrxn1	NRX1A_RAT	0.0677
504	Calmodulin regulator protein PCP4	Pcp4	PCP4_RAT	-0.2633
505	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1	Rpn1	Q6P7A7_RAT	-0.0856
506	GTPase HRas	Hras	RASH_RAT	-0.0992
507	Reticulon-1	Rtn1	RTN1_RAT	-0.1342
508	Sorting and assembly machinery component 50 homolog	Samm50	SAM50_RAT	0.1481
509	Wiskott-Aldrich syndrome protein family member 1	Wasf1	WASF1_RAT	-0.0383
510	Anion exchange protein	Slc4a10	A0A0G2JYF0_RAT	-0.2042

511	Ezrin	Ezr	A0A0G2K890_RAT	-0.1018
512	40S ribosomal protein S4	Rps4x	A0A0H2UHX3_RAT	0.0280
513	RAB5B, member RAS oncogene family	Rab5b	A1L1J8_RAT	0.0460
514	NADH:ubiquinone oxidoreductase subunit A7	Ndufa7	A9UMV9_RAT	0.0354
515	Aldose reductase	Akr1b1	ALDR_RAT	0.2023
516	ATPase inhibitor, mitochondrial	Atp5if1	ATIF1_RAT	-0.0162
517	40S ribosomal protein S8	Rps8	B2RYR8_RAT	-0.0189
518	Claudin-11	Cldn11	CLD11_RAT	0.0946
519	CB1 cannabinoid receptor-interacting protein 1	Cnrip1	CNRP1_RAT	0.0501
520	Cytochrome c oxidase subunit 6C-2	Cox6c2	CX6C2_RAT	-0.2185
521	Pleckstrin and Sec7 domain-containing 3	Psd3	D3ZFY7_RAT	-0.2334
522	Oxoglutarate dehydrogenase-like	Ogdhl	D3ZQD3_RAT	0.0159
523	MICOS complex subunit	Chchd3	D3ZUX5_RAT	-0.1643
524	Catenin alpha 2	Ctnna2	D4A6H8_RAT	0.0021
525	Glutamate decarboxylase 2	Gad2	DCE2_RAT	0.0605
526	Endoplasmic reticulum resident protein 29	Erp29	ERP29_RAT	-0.0929
527	Peptidyl-prolyl cis-trans isomerase FKBP8	Fkbp8	FKBP8_RAT	0.1056
528	Heterogeneous nuclear ribonucleoprotein Q	Syncrip	M0R735_RAT	-0.1012
529	Membrane-associated phosphatidylinositol transfer protein 1	Pitpm1	PITM1_RAT	0.1695
530	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit	Ppp1ca	PP1A_RAT	-0.0387
531	Peptidyl-prolyl cis-trans isomerase D	Ppid	PPID_RAT	0.0023
532	Reticulocalbin-2	Rcn2	RCN2_RAT	-0.0065
533	Regulator of G-protein signaling 7	Rgs7	RGS7_RAT	0.1045

534	RNA-binding motif protein, X chromosome retrogene-like	Rbmxrt1	RMXRL_RAT	0.1133
535	Saccharopine dehydrogenase-like oxidoreductase	Sccpdh	SCPDL_RAT	0.0162
536	Staphylococcal nuclease domain-containing protein 1	Snd1	SND1_RAT	0.0702
537	Thioredoxin	Txn	THIO_RAT	-0.2469
538	Vesicle-associated membrane protein-associated protein B	Vapb	VAPB_RAT	-0.1486
539	Secretory carrier-associated membrane protein	Scamp5	A0A0G2K464_RAT	-0.1345
540	Tropomyosin alpha-1 chain	Tpm1	A0A0G2K7F7_RAT	0.2820
541	Protein kinase, cAMP-dependent, catalytic, alpha	Prkaca	A1L1M0_RAT	0.3017
542	Alcohol dehydrogenase [NADP(+)]	Akr1a1	AK1A1_RAT	0.0444
543	GNAS complex locus	Gnas	B0BMW4_RAT	-0.0371
544	Adaptor-related protein complex 3 subunit delta 1	Ap3d1	B5DFK6_RAT	-0.2006
545	Complexin-2	Cplx2	CPLX2_RAT	0.0455
546	Centrosomal protein 170B	Cep170b	D4A1G8_RAT	-0.1785
547	Elongation factor 1-alpha 1	Eef1a1	EF1A1_RAT	0.2992
548	Electron transfer flavoprotein subunit alpha, mitochondrial	Etfa	ETFA_RAT	0.0590
549	Leucine-rich PPR motif-containing protein, mitochondrial	Lrpprc	F1LM33_RAT	0.1015
550	Gamma-aminobutyric acid type B receptor subunit 1	Gabbr1	GABR1_RAT	-0.1639
551	ADAM metallopeptidase domain 22	Adam22	M0R5P8_RAT	-0.0678

552	40S ribosomal protein S6	Rps6	M0RD75_RAT	-0.0514
553	Adaptin ear-binding coat-associated protein 1	Necap1	NECP1_RAT	0.0543
554	NADH dehydrogenase (Ubiquinone) Fe-S protein 7	Ndufs7	Q5RJN0_RAT	0.1212
555	Glioblastoma amplified sequence	Nipsnap2	Q5RK08_RAT	0.0312
556	RAB10, member RAS oncogene family	Rab10	Q5RKJ9_RAT	-0.0364
557	Tetraspanin	Cd81	Q6P9V1_RAT	-0.0890
558	Secernin-1	Scrn1	SCRN1_RAT	-0.0252
559	Dynein light chain 2, cytoplasmic	Dynll2	DYL2_RAT	-0.0046
560	ATP synthase subunit epsilon, mitochondrial	Atp5f1e	ATP5E_RAT	-0.1463
561	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B alpha isoform	Ppp2r2a	2ABA_RAT	0.0326
562	D-dopachrome tautomerase, isoform CRA_a	Ddt	A0A0F7RQJ6_RAT	0.0390
563	IQ motif and Sec7 domain 1	Iqsec1	A0A0G2JUG7_RAT	-0.2104
564	Disks large homolog 1	Dlg1	A0A0G2K1M2_RAT	0.0343
565	Mitochondrial carrier 2	Mtch2	A0A0G2K459_RAT	0.0613
566	Pgm1 protein	Pgm1	A1A5L2_RAT	-0.0003
567	Ankyrin repeat and sterile alpha motif domain-containing protein 1B	Anks1b	ANS1B_RAT	-0.0325
568	Sodium/potassium-transporting ATPase subunit beta-3	Atp1b3	AT1B3_RAT	-0.2116
569	Gap junction alpha-1 protein	Gja1	CXA1_RAT	0.3014
570	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial	LOC100912599	D3ZCZ9_RAT	-0.1430
571	Guanine nucleotide-binding protein subunit beta-5	Gnb5	D3ZZ54_RAT	-0.0775
572	ES1 protein homolog, mitochondrial	N/A	ES1_RAT	-0.0390

573	Glutamate receptor ionotropic, NMDA 2B	Grin2b	G3V746_RAT	0.0442
574	RCG55135, isoform CRA_b	Tln1	G3V852_RAT	-0.1030
575	Vacuolar protein sorting-associated protein 35	Vps35	G3V8A5_RAT	0.0062
576	Proteasome subunit beta	Psmb4	G3V8U9_RAT	0.0758
577	Gephyrin	Gphn	GEPH_RAT	-0.0947
578	Heterogeneous nuclear ribonucleoprotein D0	Hnrnpd	HNRPD_RAT	-0.0443
579	Neuron-specific calcium-binding protein hippocalcin	Hpca	HPCA_RAT	0.3366
580	SH3 and multiple ankyrin repeat domains protein 2	Shank2	M0R5T5_RAT	0.2332
581	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial	Ndufs4	NDUS4_RAT	-0.0016
582	Serine/threonine-protein kinase PAK 1	Pak1	PAK1_RAT	-0.1110
583	26S proteasome regulatory subunit 6A	Psmc3	PRS6A_RAT	-0.0255
584	Hyou1 protein	Hyou1	Q6P136_RAT	0.1162
585	Cytochrome b-c1 complex subunit 8	Uqcrcq	QCR8_RAT	-0.0145
586	60S ribosomal protein L5	Rpl5	RL5_RAT	-0.2220
587	Vesicular glutamate transporter 1	Slc17a7	VGLU1_RAT	-0.0733
588	Actin, beta-like 2	Actb12	D3ZRN3_RAT	-0.1176
589	Disks large homolog 3	Dlg3	A0A096MJ42_RAT	-0.0280
590	3-hydroxybutyrate dehydrogenase, type 1, isoform CRA_a	Bdh1	A0A0G2JSH2_RAT	0.0087
591	Myosin light polypeptide 6	Myl6	A0A0G2K6J5_RAT	-0.1892
592	Myosin-11	Myh11	A0A0G2K6S9_RAT	-0.0050
593	DEAD-box helicase 3, X-linked	Ddx3x	A0A0G2K719_RAT	-0.1926
594	RCG62531, isoform CRA_g	Tpm3	A0A140TAF0_RAT	-0.1962

595	Protein kinase C delta type	Prkcd	A0A140UHX0_RAT	-0.0155
596	Sodium/potassium-transporting ATPase subunit beta-2	Atp1b2	AT1B2_RAT	0.0133
597	ATP synthase subunit e, mitochondrial	Atp5me	ATP5I_RAT	-0.1758
598	60S ribosomal protein L7	Rpl7	B0K031_RAT	0.1723
599	Pck2 protein	Pck2	B2RYG2_RAT	-0.0706
600	40S ribosomal protein S7	Rps7	B5DEL9_RAT	-0.0142
601	60S ribosomal protein L14	Rpl14	B5DEM5_RAT	0.0932
602	Adapter molecule crk	Crk	CRK_RAT	-0.0804
603	Similar to 60S acidic ribosomal protein P2	LOC498555	D4A4D5_RAT	0.0934
604	DEAH (Asp-Glu-Ala-His) box polypeptide 9 (Predicted)	Dhx9	D4A9D6_RAT	-0.1864
605	Heterogeneous nuclear ribonucleoprotein U-like 2	Hnrnpul2	D4ABT8_RAT	-0.1836
606	AFG3-like matrix AAA peptidase subunit 2	Afg3l2	F1LN92_RAT	-0.0717
607	Proteasome 26S subunit, ATPase 6	Psmc6	G3V6W6_RAT	0.0020
608	Uncharacterized protein	N/A	M0R8A4_RAT	-0.0556
609	Non-POU domain-containing octamer-binding protein	Nono	NONO_RAT	-0.1846
610	Acyl-CoA thioesterase 9	Acot9	Q5U2X8_RAT	-0.1630
611	Ras-related protein Rab-35	Rab35	RAB35_RAT	-0.1272
612	Receptor of activated protein C kinase 1	Rack1	RACK1_RAT	0.0702
613	Ras-related protein Rap-2b	Rap2b	RAP2B_RAT	-0.0695
614	D-3-phosphoglycerate dehydrogenase	Phgdh	SERA_RAT	-0.0239
615	Stomatin-like protein 2, mitochondrial	Stoml2	STML2_RAT	-0.0744
616	Toll-interacting protein	Tollip	TOLIP_RAT	0.3502

617	Ubiquitin-conjugating enzyme E2 N	Ube2n	UBE2N_RAT	0.1392
618	Src substrate cortactin	Ctnn	A0A0G2JZ13_RAT	-0.0791
619	Target of myb1-like 2 membrane-trafficking protein	Tom1l2	A0A0G2K9L2_RAT	-0.0866
620	Nucleosome assembly protein 1-like 4	Nap1l4	A0A0H2UHZ2_RAT	0.0088
621	A-kinase anchor protein 2	Akap2	AKAP2_RAT	0.0426
622	Mitochondrial carrier 1	Mtch1	B0BN30_RAT	0.0298
623	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial	Ndufb8	B2RYS8_RAT	0.0630
624	Eukaryotic translation elongation factor 1 beta 2	Eef1b2	B5DEN5_RAT	0.1352
625	Cadherin-2	Cdh2	CADH2_RAT	-0.0228
626	Type I inositol 3,4-bisphosphate 4-phosphatase	Inpp4a	D3ZBL5_RAT	0.0422
627	Inter-alpha-trypsin inhibitor heavy chain H3	Itih3	D3ZBS2_RAT	0.1703
628	60S ribosomal protein L13	LOC100360491	D3ZRM9_RAT	-0.0137
629	Hsc70-interacting protein	St13	F10A1_RAT	0.2160
630	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12	Ndufa12	F1LXA0_RAT	-0.0236
631	Phosphatidylinositol 4-phosphate 5-kinase type-1 gamma	Pip5k1c	F1M8H6_RAT	0.0010
632	Guanine nucleotide-binding protein subunit beta-4	Gnb4	GBB4_RAT	0.1402
633	Ribosomal protein S2	N/A	O55214_RAT	0.0156
634	Propionyl-CoA carboxylase alpha chain, mitochondrial	Pcca	PCCA_RAT	0.1710
635	Phytanoyl-CoA hydroxylase-interacting	Phyhipl	PHIPL_RAT	-0.0845

	protein-like			
	Protein-L-isoaspartate(D-aspartate)			
636	O-methyltransferase	Pcmt1	PIMT_RAT	0.0223
637	Proteasome subunit alpha type-2	Psma2	PSA2_RAT	-0.2576
638	Proteasome subunit alpha type-6	Psma6	PSA6_RAT	-0.1561
639	C2CD2-like	C2cd2l	Q5U2P5_RAT	0.0689
640	Phosphoserine aminotransferase	Psat1	Q68FU2_RAT	-0.0221
641	Ras-related protein Ral-A	Rala	RALA_RAT	0.0979
642	60S acidic ribosomal protein P0	Rplp0	RLA0_RAT	0.3026
643	Vesicle-trafficking protein SEC22b	Sec22b	SC22B_RAT	-0.0592
644	Secretogranin-2	Scg2	SCG2_RAT	-0.0451
645	Sodium channel protein type 2 subunit alpha	Scn2a	SCN2A_RAT	-0.0821
646	Valine--tRNA ligase	Vars	SYVC_RAT	0.2044
647	Leukocyte surface antigen CD47	Cd47	A0A0G2JTH4_RAT	0.0343
648	Rap guanine nucleotide exchange factor 2	Rapgef2	A0A0G2JU11_RAT	-0.0402
649	S-phase kinase-associated protein 1	Skp1	A0A0G2K4X8_RAT	-0.1105
650	Spectrin beta chain	Sptbn4	A0A0G2K677_RAT	-0.3690
651	NSFL1 cofactor p47	Nsfl1c	A0A0G2K911_RAT	-0.0660
652	Arp2/3 complex 34 kDa subunit	Arpc2	A0A0G2K9A2_RAT	0.0903
653	Amine oxidase [flavin-containing] B	Maob	AOFB_RAT	0.0383
654	Atlastin-1	Atl1	ATLA1_RAT	-0.0340
655	Tetraspanin	Cd9	B1WBM0_RAT	0.3477
656	Cytochrome b-c1 complex subunit 7	Uqcrb	B2RYS2_RAT	0.0642
	NADH dehydrogenase (Ubiquinone) Fe-S			
657	protein 5	Ndufs5	B5DEL8_RAT	-0.2415

658	Membrane palmitoylated protein 6	Mpp6	B5DFE0_RAT	0.1655
659	Cathepsin D	Ctsd	CATD_RAT	0.0094
660	Hsp90 co-chaperone Cdc37	Cdc37	CDC37_RAT	-0.0784
661	DIRAS family GTPase 2	Diras2	D3ZHX3_RAT	0.2202
662	SOGA family member 3	Soga3	D4A0A1_RAT	-0.1010
663	RCG34610, isoform CRA_c	Srsf1	D4A9L2_RAT	-0.3070
664	ATP-dependent RNA helicase DDX1	Ddx1	DDX1_RAT	0.0420
665	Eukaryotic translation initiation factor 3 subunit A	Eif3a	EIF3A_RAT	-0.2128
666	Myristoylated alanine-rich C-kinase substrate	Marcks	F1LMW7_RAT	0.1123
667	Triple functional domain protein	Trio	F1M0Z1_RAT	-0.2802
668	Cadherin 13	Cdh13	F1M7X3_RAT	-0.0063
669	Glutathione S-transferase Mu 1	Gstm1	GSTM1_RAT	0.3216
670	Eukaryotic translation initiation factor 4H	Eif4h	IF4H_RAT	-0.0373
671	Nucleoside diphosphate kinase A	Nme1	NDKA_RAT	-0.2097
672	Neuronal growth regulator 1	Negr1	NEGR1_RAT	-0.0677
673	Nucleophosmin	Npm1	NPM_RAT	0.1152
674	DPPY splice variant c	Dpp10	Q0GLB6_RAT	-0.0224
675	ADP-ribosylation factor GTPase activating protein 1 brain isoform	Arfgap1	Q3S4A5_RAT	0.0669
676	Glutamate receptor ionotropic, NMDA 1	Grin1	Q62648_RAT	0.1408
677	Propionyl coenzyme A carboxylase, beta polypeptide	Pccb	Q68FZ8_RAT	-0.2211
678	Rho-related GTP-binding protein RhoB	Rhob	RHOB_RAT	-0.0906
679	Sodium-dependent neutral amino acid transporter SLC6A17	Slc6a17	S6A17_RAT	0.1722

680	Adenosylhomocysteinase	Ahcy	SAHH_RAT	0.2260
681	Syntaxin-binding protein 5	Stxbp5	STXB5_RAT	-0.0161
682	Thiosulfate sulfurtransferase	Tst	THTR_RAT	0.1536
683	Tubulin beta-2A chain	Tubb2a	TBB2A_RAT	0.0939
684	Apolipoprotein E	Apoe	A0A0G2K151_RAT	0.5110
685	Myelin expression factor 2	Myef2	A0A0G2K402_RAT	-0.0934
686	Aquaporin 4, isoform CRA_a	Aqp4	A0A0G2K4I1_RAT	0.4906
687	Cell adhesion molecule 3	Cadm3	A0A0G2K872_RAT	-0.1857
688	Isoaspartyl peptidase/L-asparaginase	Asrgl1	ASGL1_RAT	-0.0699
689	Acad9 protein	Acad9	B1WC61_RAT	0.1723
690	Ganglioside-induced differentiation-associated protein 1-like 1	Gdap11l	B4F774_RAT	-0.0197
691	Branched-chain-amino-acid aminotransferase, cytosolic	Bcat1	BCAT1_RAT	0.0286
692	Kinesin family member 21A	Kif21a	D3ZJJ7_RAT	0.0691
693	Enoyl-CoA hydratase, mitochondrial	Echs1	ECHM_RAT	0.1244
694	Ectonucleotide pyrophosphatase/phosphodiesterase family member 6	Enpp6	ENPP6_RAT	-0.2382
695	Ermin	Ermn	ERMIN_RAT	0.1003
696	Asparaginyl-tRNA synthetase	Nars	F1LML0_RAT	-0.0389
697	Gamma-aminobutyric acid type B receptor subunit 2	Gabbr2	GABR2_RAT	-0.1289
698	Metabotropic glutamate receptor 2	Grm2	GRM2_RAT	-0.0778
699	Histone H1.0	H1f0	H10_RAT	-0.1095
700	Lon protease homolog, mitochondrial	Lonp1	LONM_RAT	0.0319
701	Cofilin 2	Cfl2	M0RC65_RAT	0.0636

702	Microtubule-associated protein 4	Map4	MAP4_RAT	-0.0296
703	Phosphatidylinositol 5-phosphate 4-kinase type-2 beta	Pip4k2b	PI42B_RAT	-0.5278
704	Profilin-1	Pfn1	PROF1_RAT	-0.0382
705	Annexin	Anxa11	Q5XI77_RAT	-0.0237
706	ATP-dependent 6-phosphofructokinase	Pfk1	Q6P783_RAT	-0.1539
707	Ras-related protein Rab-18	Rab18	RAB18_RAT	0.1917
708	Ras-related protein Rab-3C	Rab3c	RAB3C_RAT	0.0331
709	GTP-binding nuclear protein Ran	Ran	RAN_RAT	-0.2188
710	Endophilin-A2	Sh3gl1	SH3G1_RAT	-0.0492
711	Syntaphilin	Snph	SNPH_RAT	0.0568
712	4-trimethylaminobutyraldehyde dehydrogenase	Aldh9a1	A0A0G2JSI1_RAT	0.0387
713	Transcriptional activator protein Pur-beta	Purb	A0A0G2JUX5_RAT	0.1310
714	Syntaxin-12	Stx12	A0A0G2JVB6_RAT	0.0051
715	Gamma-adducin	Add3	A0A0G2JW28_RAT	0.1505
716	Actin-binding LIM protein 2	Ablim2	A0A0G2JXC7_RAT	0.0354
717	Isoleucyl-tRNA synthetase 2, mitochondrial	Iars2	A0A0G2K261_RAT	0.0953
718	Ubiquitin-specific peptidase 9, X-linked	Usp9x	A0A0G2K2C7_RAT	0.2363
719	Tyrosine-protein kinase receptor	Ntrk2	A0A0G2K5X6_RAT	-0.2480
720	Vinculin	Vcl	A0A0G2K8V2_RAT	-0.1547
721	Acyl-CoA synthetase family member 2, mitochondrial	Acsf2	ACSF2_RAT	0.4163
722	40S ribosomal protein S5	Rps5	B0BN81_RAT	-0.0264
723	Complexin-1	Cplx1	CPLX1_RAT	-0.1571
724	5'-nucleotidase domain-containing 3	Nt5dc3	D3ZAI6_RAT	-0.2288

		RGD13108		
725	Similar to putative protein (5S487)	19	D3ZBU7_RAT	0.3165
726	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	Ndufa2	D3ZS58_RAT	-0.1091
727	Peroxisomal multifunctional enzyme type 2	Hsd17b4	DHB4_RAT	0.2682
728	Neuronal pentraxin receptor	Nptxr	F1LSY2_RAT	-0.0259
729	RCG48149, isoform CRA_b	LOC100363782	G3V6H0_RAT	-0.0717
730	26S proteasome regulatory subunit 7	Psmc2	G3V7L6_RAT	-0.0247
731	Phosphatidate cytidyltransferase	Cds2	G3V8W2_RAT	-0.3007
732	Protein IMPACT	Impact	IMPCT_RAT	-0.1032
733	Protein kinase C epsilon type	Prkce	KPCE_RAT	-0.4106
734	Microtubule-associated protein RP/EB family member 3	Mapre3	MARE3_RAT	-0.0738
735	Myosin regulatory light chain 12B	Myl12b	ML12B_RAT	0.1155
736	Neurexin-3	Nrxn3	NRX3A_RAT	0.0308
737	Plasminogen activator inhibitor 1 RNA-binding protein	Serbp1	PAIRB_RAT	-0.0121
738	Prenylcysteine oxidase	Pcyox1	PCYOX_RAT	-0.1256
739	Serine/threonine-protein phosphatase 5	Ppp5c	PPP5_RAT	-0.0122
740	Proteasome subunit alpha type-1	Psm1	PSA1_RAT	-0.0808
741	Bifunctional purine biosynthesis protein PURH	Atic	PUR9_RAT	-0.0618
742	DnaJ (Hsp40) homolog, subfamily A, member 2	Dnaja2	Q5M9H7_RAT	0.0163
743	Tropomyosin alpha-4 chain	Tpm4	TPM4_RAT	0.1472
744	Superoxide dismutase [Mn], mitochondrial	Sod2	SODM_RAT	0.0005

745	Lymphocyte antigen 6 family member H	Ly6h	A0A096MJ90_RAT	-0.1371
746	Ras homolog family member G	Rhog	A0A096MJM1_RAT	-0.0176
747	Secretory carrier-associated membrane protein	Scamp1	A0A0G2JY82_RAT	-0.0548
748	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase), isoform CRA_a	Ogt	A0A0G2K3V4_RAT	0.0598
749	Thioredoxin-like protein 1	Txn1l	A0A0G2K737_RAT	-0.0792
750	6-phosphogluconate dehydrogenase, decarboxylating	Kif1b	A0A0G2K7Q8_RAT	-0.2332
751	Calcineurin subunit B type 1	Ppp3r1	A0A0H2UHV6_RAT	0.3243
752	Epsin-1	Epn1	A0A140TAC3_RAT	-0.0161
753	Long-chain specific acyl-CoA dehydrogenase, mitochondria	Acadl	ACADL_RAT	0.1082
754	A-kinase anchor protein 12	Akap12	AKA12_RAT	0.1741
755	ATP synthase-coupling factor 6, mitochondrial	Atp5j	ATP5J_RAT	-0.0041
756	NADH dehydrogenase (Ubiquinone) Fe-S protein 8 (Predicted), isoform CRA_a	Ndufs8	B0BNE6_RAT	-0.1126
757	RAB5C, member RAS oncogene family	Rab5c	B0BNK1_RAT	0.0941
758	Fam49b protein	Fam49b	B2GUZ9_RAT	0.1613
759	Cox7a2l protein	Cox7a2l	B2RYT5_RAT	-0.0449
760	RCG45615, isoform CRA_a	Rpl12	B2RYU2_RAT	0.1063
761	Coactosin-like protein	Cotl1	COTL1_RAT	-0.1439
762	Alpha glucosidase 2 alpha neutral subunit (Predicted)	Ganab	D3ZAN3_RAT	0.0297
763	Actinin alpha 2	Actn2	D3ZCV0_RAT	0.0068

	Epidermal growth factor receptor pathway			
764	substrate 15-like 1	Eps15l1	D3ZJR1_RAT	0.1679
765	Intersectin-1	Itsn1	D3ZV52_RAT	-0.3023
766	NCK-interacting protein with SH3 domain	Nckipsd	D3ZWX4_RAT	0.0144
767	Dipeptidyl peptidase 3	Dpp3	DPP3_RAT	-0.0059
	Electron transfer flavoprotein-ubiquinone			
768	oxidoreductase, mitochondrial	Etfdh	ETFD_RAT	0.0302
769	A-kinase anchor protein 5	Akap5	F1LPP6_RAT	0.1055
770	Ryanodine receptor 2	Ryr2	F1LRZ1_RAT	-0.0986
771	Ribosome-binding protein 1	Rrbp1	F1M853_RAT	-0.1022
772	Importin subunit beta-1	Kpnb1	F2Z3Q8_RAT	-0.0859
773	Contactin-2	Cntn2	G3V758_RAT	0.0886
774	Peroxiredoxin 3	Prdx3	G3V7I0_RAT	0.1194
775	RCG57812, isoform CRA_b	Slk	G3V7I8_RAT	0.0341
776	Glia maturation factor beta	Gmfb	GMFB_RAT	0.0791
	Guanine nucleotide-binding protein G(i)			
777	subunit alpha-1	Gnai1	GNAI1_RAT	-0.1847
778	Isovaleryl-CoA dehydrogenase, mitochondrial	Ivd	IVD_RAT	-0.0380
779	Neuronal pentraxin-1	Nptx1	NPTX1_RAT	-0.0380
780	Ornithine aminotransferase, mitochondrial	Oat	OAT_RAT	0.1829
781	Obg-like ATPase 1	Ola1	OLA1_RAT	-0.0865
782	Ubiquitin thioesterase OTUB1	Otub1	OTUB1_RAT	0.1270
	Phosphatidylinositol transfer protein alpha			
783	isoform	Pitpna	PIPNA_RAT	0.0418
784	60S ribosomal protein L8	Rpl8	RL8_RAT	-0.0695
785	40S ribosomal protein S11	Rps11	RS11_RAT	-0.0697

786	Mitochondrial import inner membrane			
	translocase subunit Tim10	Timm10	TIM10_RAT	-0.1849
787	UDP-glucose:glycoprotein			
	glucosyltransferase 1	Uggt1	UGGG1_RAT	-0.1316
788	Acyl carrier protein	Ndufab1	D3ZF13_RAT	0.1317
789	Protein disulfide-isomerase A6	Pdia6	A0A0G2JSZ5_RAT	-0.2362
790	EH domain-containing protein 3	Ehd3	A0A0G2JTH6_RAT	-0.0230
791	Disco-interacting protein 2 homolog B	Dip2b	A0A0G2JY22_RAT	0.0276
792	Protocadherin 1	Pcdh1	A0A0G2K6T9_RAT	-0.0782
793	Dolichyl-diphosphooligosaccharide--protein			
	glycosyltransferase subunit 2	Rpn2	A0A0G2K757_RAT	0.0711
794	F-box protein 41	Fbxo41	A0A0G2K9A9_RAT	-0.0685
795	Kinesin light chain 1	Klc1	A0A140TAB3_RAT	-0.0140
796	Core histone macro-H2A	H2afy	A0A140TAB4_RAT	-0.0434
797	ELAV-like protein	Elavl4	A0A140TAF2_RAT	-0.1582
798	ATP-binding cassette sub-family B member 8,			
	mitochondrial	Abcb8	ABCB8_RAT	0.1500
799	3-hydroxyacyl-CoA dehydrogenase type-2	Hsd17b10	B0BMW2_RAT	-0.0616
800	Protein tyrosine kinase 9-like (A6-related			
	protein) (Predicted), isoform CRA_b	Twf2	B0BMY7_RAT	-0.1011
801	Activator of Hsp90 ATPase activity 1	Ahsa1	B0BN63_RAT	0.0942
802	Similar to Vacuolar protein sorting 26			
	homolog (VPS26 protein homolog), isoform			
	CRA_a	Vps26b	B1WBS4_RAT	-0.1142
803	Actin-related protein 2/3 complex subunit 3	Arpc3	B2GV73_RAT	0.0677
804	NADH dehydrogenase (Ubiquinone) 1 beta			
	subcomplex, 9	Ndufb9	B2RYW3_RAT	-0.0614
805	Coatomer subunit alpha	Copa	B5DFK1_RAT	-0.1751

806	Glutathione S-transferase omega 1	N/A	B6DYQ5_RAT	-0.0178
807	Plexin A1	Plxna1	D3Z981_RAT	0.0105
808	Uncharacterized protein	N/A	D3ZAU6_RAT	-0.3905
809	Eukaryotic translation initiation factor 4 gamma, 1	Eif4g1	D3ZU13_RAT	-0.1460
810	Uncharacterized protein	N/A	D3ZX87_RAT	-0.3705
811	NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 11 (Predicted)	Ndufb11	D4A7L4_RAT	0.0593
812	Amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (Glycogen debranching enzyme, glycogen storage disease type III) (Predicted), isoform CRA_a	Agl	D4AEH9_RAT	0.2095
813	NADH:ubiquinone oxidoreductase subunit B4	Ndufb4	F1LPG5_RAT	-0.1923
814	Inositol-1-monophosphatase	Impa1	F1M978_RAT	0.0654
815	Peptidyl-prolyl cis-trans isomerase FKBP1A	Fkbp1a	FKB1A_RAT	-0.0504
816	Pyridoxal kinase	Pdxk	G3V647_RAT	0.0372
817	Disks large-associated protein 3	Dlgap3	G3V7T8_RAT	0.0247
818	Glutathione hydrolase 7	Ggt7	GGT7_RAT	0.2027
819	Metabotropic glutamate receptor 3	Grm3	GRM3_RAT	-0.2074
820	Vesicle amine transport 1-lik	Vat1l	M0R3N4_RAT	0.0570
821	Uncharacterized protein	Chl1	M0RC17_RAT	0.0613
822	NADPH--cytochrome P450 reductase	Por	NCPR_RAT	0.0562
823	Aspartyl aminopeptidase	Dnpep	Q4V8H5_RAT	-0.0208
824	RAS-related 2	Rras2	Q5BJU0_RAT	0.2514
825	Carboxypeptidase E	Cpe	Q5U322_RAT	0.0086
826	60S ribosomal protein L6	Rpl6	Q6P790_RAT	-0.0940
827	Proteasome subunit alpha type	Psm5	Q6P9V6_RAT	-0.0244

828	WFS1	Wfs1	Q9JLT5_RAT	0.0915
829	Tectonin beta-propeller repeat-containing protein 1	Tecpr1	TCPR1_RAT	-0.2155
830	Transcription intermediary factor 1-beta	Trim28	TIF1B_RAT	-0.1721
831	Synaptobrevin homolog YKT6	Ykt6	YKT6_RAT	-0.1241
832	Dynactin subunit 3	Dctn3	D4A1B8_RAT	0.1591
833	ATP synthase subunit g, mitochondrial	Atp5l	ATP5L_RAT	0.4678
834	NADH dehydrogenase [ubiquinone] 1 subunit C2	Ndufc2	Q5PQZ9_RAT	-0.2138
835	Mitochondrial fission factor	LOC102556337	A0A0G2K2M2_RAT	0.0946
836	UTP--glucose-1-phosphate uridylyltransferase	Ugp2	A0A0G2K542_RAT	0.0528
837	RCG61099, isoform CRA_b	Srsf3	A0A0U1RRV7_RAT	-0.2341
838	Arf-GAP with SH3 domain, ANK repeat and PH domain-containing protein 1	Asap1	ASAP1_RAT	0.0201
839	ATPase family AAA domain-containing protein 3	Atad3	ATAD3_RAT	-0.1816
840	Rps16 protein	Rps16	B0K038_RAT	-0.1060
841	Carbonic anhydrase 2	Ca2	CAH2_RAT	0.1438
842	CUGBP Elav-like family member 2	Celf2	CELF2_RAT	-0.2244
843	Proline-rich transmembrane protein 3	Prrt3	D3ZWQ0_RAT	-0.1331
844	G protein-coupled receptor 21 (Predicted), isoform CRA_a	Rabgap1	D3ZX42_RAT	-0.1914
845	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6	Ndufa6	D4A3V2_RAT	0.3206
846	Solute carrier family 12 member 2	Slc12a2	E9PTX9_RAT	-0.0351
847	Enoyl-CoA delta isomerase 1, mitochondrial	Eci1	ECI1_RAT	0.3005

	Echinoderm microtubule-associated			
848	protein-like 2	Eml2	EMAL2_RAT	0.1671
849	Electron transfer flavoprotein subunit beta	Etfb	ETFB_RAT	-0.0260
850	PEX5-related protein	Pex5l	F1LMT5_RAT	-0.2654
851	Protein lin-7 homolog	Lin7a	F1LQV9_RAT	0.0279
852	Rap1 GTPase-activating protein	Rap1gap	F1LV89_RAT	0.1141
	Calcium/calmodulin-dependent protein kinase			
853	ID	Camk1d	F1LVR4_RAT	0.0542
854	Oligodendrocyte-myelin glycoprotein	Omg	F7EYB9_RAT	0.2498
855	Cell adhesion molecule 1	Cadm1	F7EYW4_RAT	-0.0327
		LOC100911		
856	Mitofusin-2	485	F7FHF7_RAT	0.1125
857	Coronin	Coro1c	G3V624_RAT	0.0434
	Gamma-aminobutyric acid receptor subunit			
858	alpha-1	Gabra1	GBRA1_RAT	0.0249
	Gamma-aminobutyric acid receptor subunit			
859	beta-2	Gabrb2	GBRB2_RAT	0.0913
860	Hippocalcin-like protein 4	Hpcal4	HPCL4_RAT	0.3822
861	Ig kappa chain C region, A allele	N/A	KACA_RAT	-0.1397
862	MICOS complex subunit Mic25	Chchd6	MIC25_RAT	-0.1944
863	Neutral cholesterol ester hydrolase 1	Nceh1	NCEH1_RAT	-0.0036
	N-terminal EF-hand calcium-binding protein			
864	1	Necab1	NECA1_RAT	0.3593
865	Nucleobindin-1	Nucb1	NUCB1_RAT	0.3261
	Calcium/calmodulin-dependent 3',5'-cyclic			
866	nucleotide phosphodiesterase 1B	Pde1b	PDE1B_RAT	0.2268
867	Protein phosphatase 1 regulatory subunit 7	Ppp1r7	PP1R7_RAT	-0.0301

868	Major prion protein	Prnp	PRIO_RAT	-0.0544
869	26S proteasome regulatory subunit 4	Psmc1	PRS4_RAT	-0.0184
870	Proteasome subunit alpha type-4	Psma4	PSA4_RAT	-0.1389
871	Long-chain fatty acid transport protein 1	Slc27a1	Q6GMM8_RAT	-0.0224
872	60S ribosomal protein L3	Rpl3	RL3_RAT	-0.2796
873	40S ribosomal protein S9	Rps9	RS9_RAT	0.1464
874	tRNA-splicing ligase RtcB homolog	Rtcb	RTCB_RAT	-0.0163
875	Tumor protein p63-regulated gene 1-like protein	Tprg1l	TPRGL_RAT	0.1914
876	V-type proton ATPase subunit F	Atp6v1f	VATF_RAT	0.0078
877	Exportin-1	Xpo1	XPO1_RAT	-0.2856
878	Cytochrome b-c1 complex subunit 6, mitochondrial	Uqcrh	QCR6_RAT	-0.1722
879	Macrophage migration inhibitory factor	Mif	A0A0F7RQL3_RAT	0.2215
880	Structural maintenance of chromosomes protein	Smc3	D4A1B9_RAT	-0.0632
881	Mobp protein	Mobp	B1WBR5_RAT	0.0391
882	FXYP domain-containing ion transport regulator 6	Fxyd6	FXYP6_RAT	-0.2944
883	Nebulin	Neb	A0A096MK15_RAT	-0.2698
884	Brain acid soluble protein 1	Basp1	A0A0G2K1L8_RAT	-0.1997
885	Synapsin-3	Syn3	A0A096MIT7_RAT	0.0659
886	Myosin phosphatase Rho-interacting protein	Mprip	A0A0G2JUR5_RAT	-0.2090
887	IQ motif and Sec7 domain 2	Iqsec2	A0A0G2JZX5_RAT	-0.0279
888	Calmodulin-regulated spectrin-associated protein family, member 3	Camsap3	A0A0G2K5C0_RAT	-0.1042
889	CAP-Gly domain-containing linker protein 1	Clip1	A0A0G2K681_RAT	-0.1967

890	MAP kinase-activating death domain protein	Madd	A0A0G2KA27_RAT	0.0984
891	Ribosomal protein S19	Rps19l2	A0A0H2UI38_RAT	0.1793
892	Programmed cell death 6-interacting protein	Pdcd6ip	A0A140TAA4_RAT	-0.0555
893	Phosphatidylinositol 4-kinase alpha	Pi4ka	A0A140TAJ5_RAT	-0.0290
894	Acetyl-CoA carboxylase 1	Acaca	ACACA_RAT	0.0014
895	Cytosolic 10-formyltetrahydrofolate dehydrogenase	Aldh1l1	AL1L1_RAT	0.0533
896	ADP-ribosylation factor 5	Arf5	ARF5_RAT	0.0905
897	Protein tweety homolog	Ttyh1	B4F773_RAT	0.1659
898	Basigin	Bsg	BASI_RAT	-0.0876
899	F-actin-capping protein subunit alpha-1	Capza1	CAZA1_RAT	-0.0917
900	Cytosolic non-specific dipeptidase	Cndp2	CNDP2_RAT	0.0236
901	Uncharacterized protein	N/A	D3ZPL5_RAT	0.0667
902	ADP-ribosylation factor-like GTPase 8A	Arl8a	D3ZPP2_RAT	-0.3775
903	Apical junction component 1 homolog	Ajm1	D3ZTF0_RAT	-0.0300
904	Eph receptor A4	Epha4	D3ZZK3_RAT	0.1303
905	Similar to RIKEN cDNA 6430548M08	RGD13048 84	D4A3C2_RAT	-0.0283
906	Rho GTPase-activating protein 1	Arhgap1	D4A6C5_RAT	0.1880
907	Cytoplasmic FMR1-interacting protein	Cyfip1	D4A8H8_RAT	-0.2805
908	Histidine triad nucleotide binding protein 2 (Predicted), isoform CRA_a	Hint2	D4AB01_RAT	-0.1021
909	Cyclin-G-associated kinase	Gak	F1LMD9_RAT	-0.2845
910	Myosin heavy chain 14	Myh14	F1LNF0_RAT	-0.0468
911	Afadin	Afdn	F1LT10_RAT	-0.2095
912	Sorbin and SH3 domain-containing protein 1	Sorbs1	F1M820_RAT	-0.1969

913	Guanine nucleotide binding protein, alpha 11	Gna11	G3V6Q6_RAT	-0.1119
914	C-1-tetrahydrofolate synthase, cytoplasmic	Mthfd1	G3V6S5_RAT	0.0620
915	Glutamate receptor 3	Gria3	G3V6Z5_RAT	-0.0916
916	26S proteasome non-ATPase regulatory subunit 1	Psm1	G3V8B6_RAT	0.1291
917	Inositol-trisphosphate 3-kinase A	Itpka	IP3KA_RAT	-0.1932
918	Phosphoribosyl pyrophosphate synthase-associated protein 2	Prpsap2	KPRB_RAT	0.1004
919	Adenylate cyclase 9	Adcy9	M0R5U4_RAT	0.0225
920	Uncharacterized protein	N/A	M0RCY2_RAT	0.1488
921	Neuronal calcium sensor 1	Ncs1	NCS1_RAT	0.2322
922	Phosphatase and actin regulator 1	Phactr1	PHAR1_RAT	-0.1865
923	Proline-rich transmembrane protein 2	Prrt2	PRRT2_RAT	0.0415
924	26S proteasome non-ATPase regulatory subunit 2	Psm2	PSMD2_RAT	0.0276
925	RCG53953, isoform CRA_a	LOC103690005	Q1RP74_RAT	-0.1503
926	FUS RNA-binding protein	Fus	Q5PQK2_RAT	-0.0854
927	Eukaryotic translation initiation factor 4B	Eif4b	Q5RKG9_RAT	-0.2205
928	60S ribosomal protein L4	Rpl4	Q6P3V9_RAT	-0.1553
929	Ras-related protein Rab-5A	Rab5a	RAB5A_RAT	0.2095
930	40S ribosomal protein S10	Rps10	RS10_RAT	0.0188
931	Transaldolase	Taldo1	TALDO_RAT	0.1058
932	Ubiquitin-conjugating enzyme E2 variant 2	Ube2v2	UB2V2_RAT	0.1092
933	Protein unc-13 homolog A	Unc13a	UN13A_RAT	-0.5656
934	RCG20461	Stum	D4A4F9_RAT	0.0618

	Guanine nucleotide-binding protein subunit			
935	gamma	Gng3	G3V8K2_RAT	-0.5103
936	Acyl-CoA-binding protein	Dbi	Q6TXF3_RAT	0.2688
937	LanC-like protein 1	Lanc1	LANC1_RAT	-0.1457
938	Astrocytic phosphoprotein PEA-15	Pea15	PEA15_RAT	0.0744
939	Cell division control protein 42 homolog	Cdc42	CDC42_RAT	-0.1626
940	Growth arrest-specific protein 7	Gas7	A0A0G2JT50_RAT	-0.0723
941	Cytoplasmic linker-associated protein 1	Clasp1	A0A0G2JUI5_RAT	0.0057
	NADH dehydrogenase [ubiquinone] 1 alpha			
942	subcomplex subunit 8	Ndufa8	A0A0G2JVL6_RAT	-0.0747
943	Paraspeckle component 1	Pspc1	A0A0G2JYN7_RAT	-0.1579
944	Serine--tRNA ligase, cytoplasmic	Sars	A0A0G2JZG7_RAT	-0.1458
945	Glutamyl-prolyl-tRNA synthetase	Eprs	A0A0G2JZI2_RAT	0.0806
	Sec23 homolog A, coat complex II			
946	component	Sec23a	A0A0G2JZM2_RAT	0.1479
947	Receptor expression-enhancing protein	Reep2	A0A0G2K1L5_RAT	0.0246
948	Far upstream element-binding protein 2	Khsrp	A0A0G2K2B3_RAT	-0.0393
949	3-ketoacyl-CoA thiolase, mitochondrial	Acaa2	A0A0G2K642_RAT	0.1487
	Heterogeneous nuclear ribonucleoprotein			
950	D-like	Hnrnpdl	A0A0G2KAZ7_RAT	0.0124
951	Coronin	Coro2a	A0A0G2QC56_RAT	0.2625
	Hepatocyte growth factor-regulated tyrosine			
952	kinase substrate	Hgs	A0A140TAH1_RAT	0.0006
953	Spectrin beta chain	Sptb	A0A140UHX6_RAT	-0.5585
954	Lasp-2	Nebi	A0A146J2K6_RAT	0.0069
955	Alcohol dehydrogenase class-3	Adh5	ADHX_RAT	0.2927
956	Arf-GAP with GTPase, ANK repeat and PH	Agap2	AGAP2_RAT	-0.1613

	domain-containing protein 2			
957	Dematin actin-binding protein	Dmtn	B2GUY4_RAT	0.0115
958	Actin-related protein 2/3 complex subunit 4	Arpc4	B2RZ72_RAT	-0.0586
959	Calpain-2 catalytic subunit	Capn2	CAN2_RAT	0.0929
960	COP9 signalosome complex subunit 4	Cops4	CSN4_RAT	0.1185
961	Plexin A4	Plxna4	D3ZES7_RAT	-0.0875
962	Immunoglobulin-like domain-containing receptor 2	Ildr2	D3ZGJ1_RAT	-0.2795
963			D3ZGL0_RAT	0.1210
964	Nodal modulator 1	Nomo1	D3ZSA9_RAT	-0.0589
965	ADAM metallopeptidase domain 23	Adam23	D3ZT36_RAT	0.2172
966	Adenylosuccinate lyase	Adsl	D3ZW08_RAT	0.0334
967	Catenin (Cadherin associated protein), delta 1 (Predicted), isoform CRA_a	Ctnnd1	D3ZZZ9_RAT	-0.0583
968	Cytoplasmic dynein 1 intermediate chain 2	Dync1i2	DC1I2_RAT	-0.0059
969	Cytoplasmic dynein 1 light intermediate chain 1	Dync1li1	DC1L1_RAT	0.0856
970	unkown		F1LM69_RAT	-0.0559
971	unkown		F1LP91_RAT	0.0369
972	Tight junction protein 1 (Predicted)	Tjp1	F1M4A0_RAT	0.0388
973	Kinesin family member 1A	Kif1a	F1M4A4_RAT	0.1129
974	cAMP-dependent protein kinase type I-beta regulatory subunit	Prkar1b	F1M9X5_RAT	0.1381
975	Laminin subunit gamma 1	Lamc1	F1MAA7_RAT	-0.1016
976	Proteasome subunit beta type	Psmb5	G3V7Q6_RAT	-0.1571
977	Golgi apparatus protein 1	Glg1	G3V8G5_RAT	0.1928

	Glycerol-3-phosphate dehydrogenase			
978	[NAD(+)], cytoplasmic	Gpd1	GPDA_RAT	-0.0479
979	Heterochromatin protein 1-binding protein 3	Hp1bp3	HP1B3_RAT	-0.1959
980	RCG31562, isoform CRA_c	Tardbp	I6L9G6_RAT	-0.0943
	ATP-dependent Clp protease proteolytic			
981	subunit	Clpp	M0RAD5_RAT	-0.1013
982	NADP-dependent malic enzyme	Me1	MAOX_RAT	0.0711
983	Monoglyceride lipase	Mgl1	MGLL_RAT	-0.0042
984	Proliferation-associated protein 2G4	Pa2g4	PA2G4_RAT	0.0538
	Phytanoyl-CoA hydroxylase-interacting			
985	protein	Phyhip	PHYIP_RAT	-0.1368
	Cytidine monophosphate N-acetylneuraminic			
986	acid synthetase	Cmas	Q5M963_RAT	0.1848
	ARP10 actin-related protein 10 homolog (S.			
987	cerevisiae)	Actr10	Q5M9F7_RAT	0.1626
988	60S ribosomal protein L13a	Rpl13a	Q5RK10_RAT	0.1672
	Eukaryotic peptide chain release factor			
989	GTP-binding subunit ERF3B-like	Gspt1	Q6AYD5_RAT	0.2304
990	Ras-related protein Rab-6A	Rab6a	RAB6A_RAT	-0.0658
991	Heterogeneous nuclear ribonucleoprotein A1	Hnrnpa1	ROA1_RAT	-0.0650
992	40S ribosomal protein SA	Rpsa	RSSA_RAT	-0.0396
993	Endophilin-A3	Sh3gl3	SH3G3_RAT	0.2361
994	Chondroitin sulfate proteoglycan 5	Cspg5	CSPG5_RAT	-0.0499
995	Cytochrome b5 type B	Cyb5b	CYB5B_RAT	-0.0087
996	Histidine triad nucleotide-binding protein 1	Hint1	HINT1_RAT	-0.0088
997	Destrin	Dstn	DEST_RAT	-0.3878
998	Tropomyosin alpha isoform	Tpm1	Q91XN7_RAT	-0.1741

999	Neurogranin	Nrgn	NEUG_RAT	-0.0883
1000	LPS-responsive beige-like anchor protein	Lrba	A0A0G2JYI0_RAT	0.0676
1001	NADH-ubiquinone oxidoreductase chain 5	ND5	A0A096XKT9_RAT	0.0842
1002	Cullin-3	Cul3	A0A0G2JSP3_RAT	0.2330
1003	26S proteasome non-ATPase regulatory subunit 11	Psmc11	A0A0G2JWX1_RAT	0.1028
1004	Rho guanine nucleotide exchange factor 2	Arhgef2	A0A0G2K0V4_RAT	-0.1170
1005	Nuclear migration protein nudC-like	LOC100911422	A0A0G2K0V8_RAT	-0.0012
1006	ARF GTPase-activating protein GIT1	Git1	A0A0G2K527_RAT	0.0732
1007	Uncharacterized protein	N/A	A0A0G2K613_RAT	0.0824
1008	LIM domain 7	Lmo7	A0A0G2K8R3_RAT	0.2920
1009	Tyrosine--tRNA ligase	Yars	A0A0H2UHG0_RAT	0.1405
1010	Aminoacylase-1A	Acy1a	ACY1A_RAT	-0.0367
1011	Agrin	Agrn	AGRIN_RAT	0.1360
1012	AMP deaminase 2	Ampd2	AMPD2_RAT	-0.1063
1013	Annexin A3	Anxa3	ANXA3_RAT	0.0044
1014	Peptidyl-prolyl cis-trans isomerase	Pin1	B0BNL2_RAT	-0.0005
1015	Protein kinase C substrate 80K-H	Prkcsh	B1WC34_RAT	-0.0602
1016	Protein kinase C	Prkca	B5DFC4_RAT	-0.1044
1017	3'(2'),5'-bisphosphate nucleotidase 1	Bpnt1	BPNT1_RAT	-0.1330
1018	Serine/threonine-protein kinase BRSK1	Brsk1	BRSK1_RAT	-0.0321
1019	Coatomer subunit gamma-1	Copg1	COPG1_RAT	0.1695
1020	cAMPS	Rapgef4	D3KR63_RAT	-0.0811
1021	Lamin B2	Lmnb2	D3ZLC1_RAT	0.1105

1022	Myosin VI	Myo6	D4A5I9_RAT	-0.2103
1023	DnaJ homolog subfamily A member 1	Dnaja1	DNJA1_RAT	-0.1611
1024	DnaJ homolog subfamily C member 5	Dnaje5	DNJC5_RAT	-0.0236
1025	Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial	Ech1	ECH1_RAT	-0.2476
1026	Elongation factor 1-delta	Eef1d	EF1D_RAT	-0.0034
1027	Mammalian ependymin-related protein 1	Epdr1	EPDR1_RAT	-0.0676
1028	G protein-coupled receptor kinase	Grk2	F1LMA4_RAT	-0.1749
1029	Sorbin and SH3 domain-containing protein 2	Sorbs2	F1LPM3_RAT	-0.0542
1030	Mitochondrial-processing peptidase subunit alpha	Pmpca	F1M964_RAT	-0.2671
1031	Redox-regulatory protein FAM213A	Fam213a	F213A_RAT	0.2217
1032	Protein-tyrosine kinase 2-beta	Ptk2b	FAK2_RAT	0.1897
1033	RCG61894, isoform CRA_a	Strn	G3V6L8_RAT	0.0511
1034	F-box only protein 2	Fbxo2	G3V774_RAT	-0.3535
1035	Glycine--tRNA ligase	Gars	G3V7G8_RAT	0.0152
1036	Clusterin	Clu	G3V836_RAT	-0.0727
1037	Leucine rich repeat neuronal 6A, isoform CRA_a	Lingo1	G3V881_RAT	-0.2834
1038	Tripartite motif protein 3, isoform CRA_a	Trim3	G3V8D6_RAT	-0.1471
1039	Growth factor receptor-bound protein 2	Grb2	GRB2_RAT	-0.1751
1040	Isocitrate dehydrogenase [NADP] cytoplasmic	Idh1	IDHC_RAT	-0.0341
1041	Kalirin	Kalrn	KALRN_RAT	0.1701
1042	UMP-CMP kinase	Cmpk1	KCY_RAT	-0.1903
1043	Lamina-associated polypeptide 2, isoform beta	Tmpo	LAP2_RAT	0.1506

1044	Lactoylglutathione lyase	Glo1	LGUL_RAT	0.0309
1045	Mitogen-activated protein kinase 3	Mapk3	MK03_RAT	-0.0158
1046	Peptidyl-prolyl cis-trans isomerase B	Ppib	PPIB_RAT	0.1369
1047	26S proteasome regulatory subunit 8	Psmc5	PRS8_RAT	0.4017
1048	Tyrosine-protein phosphatase non-receptor type 11	Ptpn11	PTN11_RAT	-0.1288
1049	Cytoplasmic dynein 1 light intermediate chain 2	Dync1li2	Q5D023_RAT	-0.3767
1050	SEC14-like 2 (<i>S. cerevisiae</i>)	Sec14l2	Q5EBD0_RAT	0.1494
1051	Acyl-Coenzyme A dehydrogenase, very long chain	Acadvl	Q5M9H2_RAT	-0.1649
1052	Leucyl-tRNA synthetase	Lars	Q5PPJ6_RAT	0.0776
1053	CARF-binding factor A	Hnrnpab	Q9QX80_RAT	-0.2521
1054	Rab GTPase-binding effector protein 1	Rabep1	RABE1_RAT	0.0718
1055	60S ribosomal protein L18	Rpl18	RL18_RAT	-0.0392
1056	Phosphatidylinositol phosphatase SAC1	Sacm1l	SAC1_RAT	0.1740
1057	Synaptotagmin-12	Syt12	SYT12_RAT	-0.0755
1058	Heat shock protein 75 kDa, mitochondrial	Trap1	TRAP1_RAT	0.2183
1059	Vesicular inhibitory amino acid transporter	Slc32a1	VIAAT_RAT	-0.0332
1060	Neurofibromin	Nf1	A0A0G2JWL3_RAT	-0.1187
1061	Synaptoporin	Synpr	A0A0G2K1H2_RAT	-0.1440
1062	Protein rogdi homolog	Rogdi	ROGDI_RAT	-0.2455
1063	Uncharacterized protein	N/A	D3ZJD3_RAT	-0.2418
1064	MICOS complex subunit	Apoo	M0R7G4_RAT	-0.0766
1065	Histone H2A.Z	H2afz	H2AZ_RAT	0.1271
1066	Charged multivesicular body protein 6	Chmp6	D3ZDR2_RAT	-0.3212

1067	Filamin-C	Flnc	A0A0H2UHR7_RAT	0.1934
1068	Ubiquinol-cytochrome c reductase, complex III subunit X	Uqcr10	A0A0G2K8Q8_RAT	0.5889
1069	3-hydroxyisobutyrate dehydrogenase, mitochondrial	Hibadh	3HIDH_RAT	0.0410
1070	unkown		A0A0A0MXV6_RAT	-0.0281
1071	E3 ubiquitin-protein ligase UBR4	Ubr4	A0A0G2JU89_RAT	0.1118
1072	Pyruvate kinase	Pkm	A0A0G2JVG3_RAT	-0.1489
1073	E3 ubiquitin-protein ligase HUWE1	Huwe1	A0A0G2JVV5_RAT	-0.2510
1074	Cytochrome P450, family 46, subfamily a, polypeptide 1	Cyp46a1	A0A0G2JWG7_RAT	0.0725
1075	ArfGAP with GTPase domain, ankyrin repeat and PH domain 3	Agap3	A0A0G2JZ83_RAT	-0.1344
1076	Scaffold attachment factor B	Safb	A0A0G2JZI0_RAT	0.1367
1077	Proteasome subunit alpha type	Psm7	A0A0G2K0W9_RAT	0.0289
1078	Prolyl endopeptidase	Prep	A0A0G2K1M8_RAT	-0.0136
1079	Malic enzyme	Me2	A0A0G2K502_RAT	0.1383
1080	Apoptosis-inducing factor 1, mitochondrial	Aifm1	A0A0G2K7K2_RAT	0.2185
1081	60S ribosomal protein L24	Rpl24	A0A0H2UH99_RAT	-0.0662
1082	40S ribosomal protein S17	Rps17	A0A0H2UHQ8_RAT	-0.1063
1083	Intracellular hyaluronan-binding protein 4	Habp4	A1L1K8_RAT	-0.2584
1084	Annexin A4	Anxa4	ANXA4_RAT	0.4405
1085	Amyloid-beta A4 precursor protein-binding family A member 1	Apba1	APBA1_RAT	0.3313
1086	Hip1r protein	Hip1r	B5DFK5_RAT	-0.3392
1087	Casein kinase II subunit beta	Csnk2b	CSK2B_RAT	0.0026
1088	COP9 signalosome complex subunit 8	Cops8	CSN8_RAT	-0.0989

1089	Cystatin-C	Cst3	CYTC_RAT	-0.1134
1090	Mitochondrial calcium uptake family, member 3	Micu3	D3ZG95_RAT	-0.2342
1091	RCG54610, isoform CRA_a	Timm50	D3ZJX5_RAT	-0.1073
1092	Plexin B2	Plxnb2	D3ZQ57_RAT	-0.0732
1093	Pyrophosphatase (inorganic) 2	Ppa2	D4A830_RAT	-0.0460
1094	Importin 9	Ipo9	D4A857_RAT	-0.1529
1095	Trifunctional enzyme subunit beta, mitochondrial	Hadhb	ECHB_RAT	-0.0684
1096	Coronin	Coro2b	F1LMV9_RAT	-0.0398
1097	Phosphofurin acidic cluster sorting protein 1	Pacs1	F1LPG3_RAT	-0.0174
1098	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2	Hcn2	F1LRY7_RAT	0.0701
1099	Leucine-rich repeat-containing 47	Lrrc47	F1LT49_RAT	-0.3410
1100	PTPRF-interacting protein alpha 2	Ppfia2	F1M8A4_RAT	0.0340
1101	Cytoskeleton-associated protein 5	Ckap5	F1M949_RAT	-0.2995
1102	F-box/LRR-repeat protein 16	Fbxl16	FXL16_RAT	-0.0691
1103	Lethal(2) giant larvae protein homolog 1	Llgl1	G3V6I1_RAT	-0.0428
1104	Solute carrier family 27 (Fatty acid transporter), member 4	Slc27a4	G3V7V3_RAT	-0.0924
1105	DNA damage-binding protein 1	Ddb1	G3V8T4_RAT	-0.0577
1106	ATPase Asna1	Asna1	G3V9T7_RAT	0.3141
1107	Glucose-6-phosphate 1-dehydrogenase	G6pdx	G6PD_RAT	0.1864
1108	Gamma-aminobutyric acid receptor subunit gamma-2	Gabrg2	GBRG2_RAT	-0.0540
1109	cAMP-dependent protein kinase catalytic subunit beta	Prkacb	KAPCB_RAT	0.2513

	Potassium voltage-gated channel subfamily A			
1110	member 2	Kcna2	KCNA2_RAT	0.1433
1111	Receptor-type tyrosine-protein phosphatase S	Ptprs	M0R711_RAT	0.0338
1112	Immunoglobulin superfamily member 21	Igsf21	M0RAS4_RAT	-0.3087
1113	Antisecretory factor	Psm�4	O88321_RAT	0.0438
1114	26S proteasome regulatory subunit 6B	Psmc4	PRS6B_RAT	-0.0657
1115	26S proteasome non-ATPase regulatory subunit 13	Psmđ13	PSD13_RAT	0.2340
1116	Cysteine desulfurase, mitochondrial	Nfs1	Q3MHT2_RAT	0.2254
1117	Aminoacyl tRNA synthetase complex-interacting multifunctional protein 1	Aimp1	Q4G079_RAT	0.2626
1118	Heterogeneous nuclear ribonucleoprotein R	Hnrnpr	Q566E4_RAT	-0.1643
1119	Lysine--tRNA ligase	Kars	Q5XIM7_RAT	-0.2608
1120	40S ribosomal protein S14	LOC100911847	Q6PDV6_RAT	0.2079
1121	40S ribosomal protein S12	Rps12	Q6PDW1_RAT	-0.2257
1122	Rho GTPase-activating protein 44	Arhgap44	RHG44_RAT	-0.0435
1123	Serine-threonine kinase receptor-associated protein	Strap	STRAP_RAT	-0.0192
1124	Syntaxin-6	Stx6	STX6_RAT	-0.0080
1125	Tripeptidyl-peptidase 2	Tpp2	TPP2_RAT	-0.1013
1126	2-iminobutanoate/2-iminopropanoate deaminase	Rida	UK114_RAT	0.2373
1127	RCG20041, isoform CRA_a	Tceal5	M0RDJ7_RAT	0.0343
1128	B-cell receptor-associated protein 31	Bcap31	Q6AY58_RAT	0.1706
1129	40S ribosomal protein S27	Rps27	RS27_RAT	-0.3674
1130	Tyrosine-protein kinase Fyn	Fyn	FYN_RAT	0.2207

	Pre-mRNA processing factor 8, isoform			
1131	CRA_a	Prpf8	G3V6H2_RAT	0.0825
1132	Sphingomyelin phosphodiesterase 3	Smpd3	NSMA2_RAT	0.0995
1133	AHNAK nucleoprotein	Ahnak	A0A0G2JU96_RAT	-0.0192
	Mitochondrial import receptor subunit			
1134	TOM20 homolog	Tomm20	TOM20_RAT	-0.0360
1135	Splicing factor 3b, subunit 1	Sf3b1	G3V7T6_RAT	-0.1199
1136	Glutaredoxin 5	Glrx5	D4ADD7_RAT	-0.0076
1137	Ribosomal protein L9	Rpl9	Q6P9U5_RAT	0.1585
1138	Similar to ribosomal protein S15a	LOC691716	A0A0G2K6I0_RAT	0.0482
1139	Multifunctional protein ADE2	Paics	PUR6_RAT	0.0906
	Phosphatidylinositol transfer protein, membrane-associated 2			
1140		Pitpm2	A0A0G2JW50_RAT	-0.3891
1141	Pleckstrin homology domain-containing A5	Plekha5	D3ZSV9_RAT	0.0686
1142	Saccin molecular chaperone	Sacs	D4A1D3_RAT	-0.0857
	PATJ, crumbs cell polarity complex component			
1143		Patj	F1MAD2_RAT	0.0152
1144	RAN-binding protein 2	Ranbp2	M0R3M4_RAT	-0.0180
		RGD13079		
1145	Similar to CG14967-PA	29	F1LSX1_RAT	0.0341
1146	Peptidyl-prolyl cis-trans isomerase	N/A	D3ZSF3_RAT	0.1244
1147	ABR, RhoGEF and GTPase-activating protein	Abr	A0A0G2JTR4_RAT	-0.1024
1148	Receptor-type tyrosine-protein phosphatase	Ptpa	A0A0G2JVR0_RAT	-0.0762
1149	Protein phosphatase 1 regulatory subunit 12A	Ppp1r12a	A0A0G2JWJ0_RAT	0.1391
1150	Serine/threonine-protein kinase mTOR	Mtor	A0A0G2JX74_RAT	0.0600
1151	Uncharacterized protein	N/A	A0A0G2JY03_RAT	0.0912
1152	Catenin alpha 1	Ctnna1	A0A0G2JYF7_RAT	-0.1736

1153	CDW92 antigen, isoform CRA_b	Slc44a1	A0A0G2K0P8_RAT	0.1282
1154	Protein transport protein Sec31A	Sec31a	A0A0G2K0X9_RAT	-0.2903
1155	Heterogeneous nuclear ribonucleoproteins C1/C2-like	LOC100911 576	A0A0G2K7B3_RAT	0.0132
1156	Ribonuclease inhibitor	Rnh1	A0A0G2K9E0_RAT	0.0777
1157	Protein phosphatase 1A	Ppm1a	A0A0H2UHE5_RAT	0.1537
1158	Meningioma expressed antigen 5 (hyaluronidase)	Oga	A0A0H2UII0_RAT	-0.0930
1159	Neurologin-2	Nlgn2	A0A0U1RRX0_RAT	-0.3132
1160	V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	Kras	A0JN17_RAT	-0.0719
1161	Adhesion G protein-coupled receptor L1	Adgrl1	AGRL1_RAT	-0.2250
1162	Alpha-aminoadipic semialdehyde dehydrogenase	Aldh7a1	AL7A1_RAT	0.1673
1163	Adenine phosphoribosyltransferase	Aprt	APT_RAT	-0.0989
1164	Serine/threonine-protein phosphatase 2A activator	Ptpa	B2RYQ2_RAT	0.0294
1165	60S ribosomal protein L34	Rpl34	B2RZD4_RAT	-0.1401
1166	Bleomycin hydrolase	Blmh	BLMH_RAT	-0.1887
1167	Calbindin	Calb1	CALB1_RAT	-0.1958
1168	CD59 glycoprotein	Cd59	CD59_RAT	-0.0590
1169	Cyclin-dependent-like kinase 5	Cdk5	CDK5_RAT	-0.0860
1170	Cysteine and glycine-rich protein 1	Csrp1	CSRP1_RAT	0.1045
1171	Cortactin-binding protein 2	Ctnbp2	CTTB2_RAT	-0.3054
1172	Cytohesin-2	Cyth2	CYH2_RAT	0.0769
1173	Apoptosis-inducing factor, mitochondria-associated 3	Aifm3	D3ZF03_RAT	-0.2393

1174	RAB, member RAS oncogene family-like 6	Rabl6	D3ZKQ4_RAT	0.1152
1175	WD repeat domain 37	Wdr37	D3ZQ02_RAT	-0.2229
1176	TBC1 domain family, member 10b	Tbc1d10b	D3ZSY8_RAT	0.1532
1177	S100 calcium-binding protein A13	S100a13	D3ZTB5_RAT	0.3151
1178	unkown		D3ZXK9_RAT	0.2268
1179	Kinectin 1	Ktn1	D4A4Z9_RAT	-0.0327
1180	Kelch repeat and BTB domain-containing 11	Kbtbd11	D4A5J1_RAT	-0.3610
1181	Eukaryotic translation initiation factor 3 subunit J	Eif3j	EIF3J_RAT	0.0815
1182	Exocyst complex component 8	Exoc8	EXOC8_RAT	0.1383
1183	Neurosecretory protein VGF	Vgf	F1LP80_RAT	0.2358
1184	Copine 4	Cpne4	F1M0Z3_RAT	-0.2913
1185	Hypothetical protein LOC681410	LOC681410	F1M3H8_RAT	-0.1357
1186	Tryptophan--tRNA ligase, cytoplasmic	Wars	F8WFH8_RAT	0.0001
1187	FERM, ARHGEF and pleckstrin domain-containing protein 1	Farp1	FARP1_RAT	-0.0143
1188	Guanine nucleotide-binding protein subunit gamma	Gng12	G3V6P8_RAT	0.0185
1189	Ephexin-1	Ngef	G3V856_RAT	0.0188
1190	Caveolae-associated protein 1	Cavin1	G3V8L9_RAT	-0.2196
1191	Coronin	Coro1b	G3V940_RAT	-0.1064
1192	Kv channel-interacting protein 4	Kcnip4	G3V9C1_RAT	-0.2815
1193	CysteinyI-tRNA synthetase	Cars	G3V9K0_RAT	-0.0212
1194	Heme oxygenase 2	Hmox2	HMOX2_RAT	0.1833
1195	Adenylate kinase 4, mitochondrial	Ak4	KAD4_RAT	0.1325
1196	Phospholipid-transporting ATPase	Atp9a	M0R6E0_RAT	0.0185

1197	Complement C3	C3	M0RBF1_RAT	-0.1637
1198	SIK family kinase 3	Sik3	M0RD40_RAT	-0.0663
1199	Microtubule-associated protein RP/EB family member 1	Mapre1	MARE1_RAT	-0.0484
1200	Noelin	Olfm1	NOE1_RAT	0.0531
1201	GPI inositol-deacylase	Pgap1	PGAP1_RAT	-0.1496
1202	Membrane-associated progesterone receptor component 1	Pgrmc1	PGRC1_RAT	-0.2370
1203	Phosphatidylinositol 5-phosphate 4-kinase type-2 alpha	Pip4k2a	PI42A_RAT	-0.0383
1204	TRK-fused gene protein	Tfg	Q4R1A4_RAT	0.0778
1205	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 3	Psmc3	Q5U2S7_RAT	-0.1760
1206	60S ribosomal protein L22	LOC100360057	Q6PDV8_RAT	-0.0564
1207	Ras-related protein Rab-21	Rab21	RAB21_RAT	-0.0704
1208	60S ribosomal protein L10	Rpl10	RL10_RAT	-0.2795
1209	40S ribosomal protein S28	Rps28	RS28_RAT	-0.3534
1210	3-mercaptopyruvate sulfurtransferase	Mpst	THTM_RAT	0.0576
1211	Transmembrane emp24 domain-containing protein 10	Tmed10	TMEDA_RAT	-0.0559
1212	Acid ceramidase	Asah1	ASAH1_RAT	0.1529
1213	Megalencephalic leukoencephalopathy with subcortical cysts 1	Mlc1	D4ABB2_RAT	0.0352
1214	Exocyst complex component 4	Exoc4	EXOC4_RAT	-0.3770
1215	General vesicular transport factor p115	Uso1	USO1_RAT	0.3035
1216	Ubiquitin-specific peptidase 14	Usp14	A0A0G2JVV5_RAT	0.3384

	Rab3 GTPase-activating protein catalytic subunit	Rab3gap1	A0A0G2JXA1_RAT	-0.1635
1217				
1218	COP9 signalosome subunit 7A	Cops7a	F1MAA2_RAT	0.0638
1219	Neuroprotective protein 13	Tecr	B3SVE9_RAT	0.3538
1220	60S ribosomal protein L29	N/A	F1LYI5_RAT	0.0310
1221	60S acidic ribosomal protein P1	Rplp1	RLA1_RAT	0.0950
	Acidic leucine-rich nuclear phosphoprotein 32 family member A	Anp32a	AN32A_RAT	0.1093
1222				
	[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2, mitochondrial	Pdk2	F1LMM8_RAT	0.1607
1223				
	High density lipoprotein binding protein (Vigilin)	Hdlbp	Q3KRF2_RAT	0.3151
1224				
1225	Plastin 3 (T-isoform), isoform CRA_a	Pls3	F1LPK7_RAT	-0.1225
1226	PC4 and SFRS1 interacting protein 1	Psip1	F1SW39_RAT	0.0482
	Fibronectin type III and SPRY domain-containing protein 1	Fsd1	B1H2A2_RAT	0.0009
1227				
1228	Parathymosin	Ptms	B3DM95_RAT	-0.1226
	FXYP domain-containing ion transport regulator 7	Fxyd7	FXYP7_RAT	0.3154
1229				
	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-4	Plcb4	PLCB4_RAT	0.2075
1230				
1231	Cathepsin B	Ctsb	CATB_RAT	0.0278
1232	Ras-related protein Rab-15	Rab15	RAB15_RAT	0.0945
	Methylcrotonoyl-CoA carboxylase subunit alpha, mitochondrial	Mccc1	F1LP30_RAT	-0.3656
1233				
1234	40S ribosomal protein S21	Rps21	A0A0G2JXC3_RAT	-0.1263
1235	Uncharacterized protein	N/A	D3ZMI8_RAT	-0.1723

	Voltage-dependent P/Q-type calcium channel			
1236	subunit alpha	Cacna1a	A0A0G2JXK1_RAT	0.2869
1237	Apoptotic chromatin condensation inducer 1	Acin1	E9PST5_RAT	-0.0594
1238	Mitochondrial fission 1 protein	Fis1	FIS1_RAT	0.2866
1239	Synaptogyrin 3	Syngr3	D4ABK1_RAT	-0.0734
	DnaJ heat shock protein family (Hsp40)			
1240	member C13	Dnajc13	D3ZN27_RAT	-0.1111
1241	Coatomer subunit beta	Copb1	COPB_RAT	-0.1395
1242	Syntrophin, basic 1 (Predicted)	Sntb1	D3ZWC6_RAT	0.1184
1243	NADH:ubiquinone oxidoreductase subunit B3	Ndufb3	D4A4P3_RAT	-0.0410
		RGD13065		
1244	Similar to hypothetical protein A530094D01	56	A0A0G2JZ88_RAT	-0.2085
1245	Thymosin beta-4	Tmsb4x	TYB4_RAT	0.2919
1246	Globin c2	Hba-a2	A0A0G2JSV6_RAT	0.1028
1247	CD151 antigen	Cd151	CD151_RAT	0.1044
1248	Myelin basic protein transcript variant 1	Mbp	I7FKL4_RAT	0.0522
1249	Paralemmin 2	Palm2	A0A096MIZ1_RAT	-0.0477
	Serine/threonine-protein phosphatase 2A 56			
1250	kDa regulatory subunit	Ppp2r5e	A0A0G2JTA1_RAT	0.0556
1251	Vacuolar protein sorting-associated protein 29	Vps29	A0A0G2JTS3_RAT	-0.0872
1252	DEAD-box helicase 19B	Ddx19a	A0A0G2JUH2_RAT	0.0972
1253	Mitochondrial calcium uniporter	Mcu	A0A0G2K059_RAT	0.1734
1254	Glutathione peroxidase	Gpx4	A0A0G2K398_RAT	-0.1751
1255	Maleylacetoacetate isomerase	Gstz1	A0A0G2K6H2_RAT	-0.1718
1256	ArfGAP with dual PH domains 1	Adap1	A0A0G2K7U5_RAT	-0.1932
1257	PRA1 family protein	Arl6ip5	A0A0H2UHF6_RAT	0.3146

1258	Acylamino-acid-releasing enzyme	Apeh	ACPH_RAT	0.1104
1259	AP-3 complex subunit mu-2	Ap3m2	AP3M2_RAT	-0.1786
1260	ATP synthase subunit f, mitochondrial	Atp5j2	ATPK_RAT	0.2932
1261	HtrA serine peptidase 2	Htra2	B0BNB9_RAT	0.0752
1262	Methylenetetrahydrofolate dehydrogenase (NADP+-dependent) 1-like	Mthfd11	B2GUZ3_RAT	0.1686
1263	Similar to RIKEN cDNA 1200007B05	Slc25a46	B2RYK4_RAT	-0.1678
1264	Aldh4a1 protein	Aldh4a1	B4F768_RAT	0.0092
1265	Hebp1 protein	Hebp1	B4F7C7_RAT	-0.0487
1266	LOC685144 protein	Sec24c	B5DEG8_RAT	-0.1134
1267	RCG55706	Stam	B5DF55_RAT	0.0842
1268	Snta1 protein	Snta1	B5DFL0_RAT	0.1199
1269	Coatomer subunit beta'	Copb2	COPB2_RAT	-0.0061
1270	Cysteine-rich protein 2	Crip2	CRIP2_RAT	-0.2669
1271	Casein kinase II subunit alpha	Csnk2a1	CSK21_RAT	0.0553
1272	Methionyl-tRNA synthetase	Mars	D3Z941_RAT	0.0890
1273	Similar to RIKEN cDNA 2310035C23	Relch	D3ZJ01_RAT	-0.3932
1274	Family with sequence similarity 171, member A2	Fam171a2	D3ZT47_RAT	0.0480
1275	Glutaryl-CoA dehydrogenase	Gcdh	D3ZT90_RAT	-0.0007
1276	Voltage-dependent L-type calcium channel subunit beta-4	Cacnb4	D4A055_RAT	-0.0930
1277	STIP1 homology and U-Box containing protein 1, isoform CRA_b	Stub1	D4A4T0_RAT	0.0412
1278	Dystrobrevin	Dtna	D4A772_RAT	0.2539
1279	Heterogeneous nuclear ribonucleoprotein H3 (2H9) (Predicted), isoform CRA_c	Hnrnph3	D4ABK7_RAT	-0.1370

1280	2,4-dienoyl-CoA reductase, mitochondrial	Decr1	DECR_RAT	-0.2354
1281	Eukaryotic translation initiation factor 3 subunit D	Eif3d	EIF3D_RAT	-0.0482
1282	Nidogen-1	Nid1	F1LM84_RAT	0.0220
1283	Hydroxyacyl glutathione hydrolase	Hagh	F1LQI1_RAT	0.0793
1284	Protein SCAI	Scai	F1M3P6_RAT	-0.1479
1285	Rho family-interacting cell polarization regulator 2	Ripor2	FA65B_RAT	0.1261
1286	Fatty acid-binding protein 5	Fabp5	FABP5_RAT	-0.3997
1287	NADH dehydrogenase (Ubiquinone) flavoprotein 3-like, isoform CRA_a	Ndufv3	G3V644_RAT	-0.2780
1288	Synaptotagmin II	Syt2	G3V6M3_RAT	0.0903
1289	Protein disulfide-isomerase A4	Pdia4	G3V6T7_RAT	0.3457
1290	Phospholipid phosphatase-related protein type 4	Plppr4	G3V864_RAT	0.4023
1291	Engulfment and cell motility 2, ced-12 homolog (C. elegans), isoform CRA_b	Elmo2	G3V982_RAT	0.2042
1292	RCG28460	Wdr47	G3V9M3_RAT	-0.0836
1293	26S proteasome non-ATPase regulatory subunit 9	Psmc9	G3V9P0_RAT	-0.0759
1294	G-protein signalling modulator 1 (AGS3-like, C. elegans), isoform CRA_c	Gpsm1	G3V9X2_RAT	0.0279
1295	G-protein signalling modulator 1 (AGS3-like, C. elegans), isoform CRA_c	Gucy1b1	GCYB1_RAT	-0.0360
1296	Voltage-gated potassium channel subunit beta-2	Kcnab2	KCAB2_RAT	0.3827
1297	Small ArfGAP 1	Smap1	M0RC57_RAT	-0.2413
1298	Uncharacterized protein	N/A	M0RCH6_RAT	-0.0285

1299	Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial	Mccc2	MCCB_RAT	-0.0114
1300	NADH-cytochrome b5 reductase 1	Cyb5r1	NB5R1_RAT	0.1273
1301	Protein NDRG3	Ndr3	NDRG3_RAT	-0.1666
1302	Neurofascin	Nfasc	NFASC_RAT	0.1439
1303	Na(+)/H(+) exchange regulatory cofactor NHE-RF1	Slc9a3r1	NHRF1_RAT	-0.1752
1304	Low molecular weight phosphotyrosine protein phosphatase	Acp1	PPAC_RAT	0.1626
1305	Protein phosphatase methylesterase 1	Ppme1	PPME1_RAT	0.0235
1306	Proteasome subunit beta type-1	Psm1	PSB1_RAT	0.2719
1307	Actin-binding LIM protein 1	Ablim1	Q3KR72_RAT	-0.2756
1308	Family with sequence similarity 126, member B	Fam126b	Q4V7D4_RAT	0.1177
1309	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12	Psm12	Q5XIC6_RAT	-0.0522
1310	GTP:AMP phosphotransferase AK3, mitochondrial	Ak3	Q6P2A5_RAT	0.2947
1311	Arginyl aminopeptidase (Aminopeptidase B)	Rnpep	Q6P7D2_RAT	0.1074
1312	60S ribosomal protein L15	Rpl15	RL15_RAT	-0.0197
1313	60S ribosomal protein L18a	Rpl18a	RL18A_RAT	-0.3609
1314	Small glutamine-rich tetratricopeptide repeat-containing protein alpha	Sgta	SGTA_RAT	0.1834
1315	Syntaxin-7	Stx7	STX7_RAT	-0.2080
1316	Mitochondrial import receptor subunit TOM34	Tomm34	TOM34_RAT	-0.0107
1317	ELKS/Rab6-interacting/CAST family member 1	Erc1	A0A0G2JYT1_RAT	-0.2193

1318	Argininosuccinate synthase	Ass1	ASSY_RAT	-0.0351
1319	N(alpha)-acetyltransferase 15, NatA auxiliary subunit	Naa15	D3ZD89_RAT	0.4619
1320	Importin 5	Ipo5	D4A781_RAT	-0.3393
1321	Dystrophin	Dmd	DMD_RAT	-0.2098
1322	RCG38820	Upf1	F1LY19_RAT	-0.0078
1323	60S ribosomal protein L19	Rpl19	RL19_RAT	0.1055
1324	RAB11 family-interacting protein 5	Rab11fip5	A0A0G2K1W1_RAT	0.0371
1325	Rho GTPase-activating protein 26	Arhgap26	A0A0G2K5D5_RAT	0.1119
1326	Adaptor protein, phosphotyrosine-interacting with PH domain and leucine zipper 1	Appl1	D3ZWA8_RAT	-0.2376
1327	Very-long-chain (3R)-3-hydroxyacyl-CoA dehydratase	Hacd3	D4ABI7_RAT	0.2615
1328	EH domain-binding protein 1	Ehbp1	F1LVX2_RAT	0.2468
1329	Receptor expression-enhancing protein 5	Reep5	REEP5_RAT	-0.0431
1330	Glycerol-3-phosphate dehydrogenase [NAD(+)]	Gpd1l	D3ZAP9_RAT	-0.0399
1331	Histone H2A	H2afx	D3ZXP3_RAT	0.0018
1332	Calcium-activated potassium channel subunit alpha-1	Kcnma1	F1LNC7_RAT	0.1077
1333	Protein lin-7 homolog C	Lin7c	LIN7C_RAT	0.0543
1334	40S ribosomal protein S25	Rps25	A0A0H2UHU0_RAT	0.0248
1335	Chloride intracellular channel protein	Clic4	A3FM27_RAT	0.1766
1336	Thioredoxin domain containing 1	Tmx1	Q52KJ9_RAT	0.1130
1337	Histone H1.5	Hist1h1b	H15_RAT	0.3845
1338	Cyclin Y	Ccny	F1MA89_RAT	0.1091
1339	Huntingtin	Htt	G3V9P7_RAT	0.1004

1340	Sodium- and chloride-dependent GABA transporter 1	Slc6a1	SC6A1_RAT	-0.0200
1341	Extended synaptotagmin 2	Esyt2	D3ZJ32_RAT	0.1272
1342	Nucleoside diphosphate kinase B	Nme2	NDKB_RAT	0.1113
1343	Ras-specific guanine nucleotide-releasing factor 1	Rasgrf1	RGRF1_RAT	-0.3299
1344	Receptor-type tyrosine-protein phosphatase N2	Ptpn2	PTPR2_RAT	0.0863
1345	Oxysterol-binding protein	Osbp	D4A9D8_RAT	0.0153
1346	60S ribosomal protein L11	Rpl11	RL11_RAT	0.2555
1347	Alpha-endosulfine	Ensa	ENSA_RAT	0.0329
1348	Thyroid hormone receptor-associated protein 3	Thrap3	TR150_RAT	-0.3915
1349	UV excision repair protein RAD23 homolog B	Rad23b	RD23B_RAT	0.2063
1350	Neuronal membrane glycoprotein M6-b	Gpm6b	A0A0G2JZB8_RAT	0.2064
1351	BWK4	Erp44	Q5VLR5_RAT	0.3663
1352	Cell cycle control protein	Tmem30a	A0A0G2JXG3_RAT	0.1005
1353	NEDD8	Nedd8	A0A0G2K4G3_RAT	0.1218
1354	Guanine nucleotide-binding protein subunit gamma	Gng2	Q45QK6_RAT	0.1128
1355	Phosphatidylinositol-specific phospholipase C, X domain-containing 3	Plcxd3	D4A1H2_RAT	-0.0793
1356	Laminin subunit alpha 1	Lama1	D4A409_RAT	0.0132
1357	Rho-GTPase-activating protein 5	Arhgap5	A0A0G2K7N9_RAT	0.2221
1358	Receptor-type tyrosine-protein phosphatase F	Ptprf	A0A0G2JT62_RAT	-0.3892
1359	Myotrophin	Mtpn	MTPN_RAT	0.0812

1360	Spectrin, alpha, erythrocytic 1	Spta1	D4A678_RAT	0.3012
1361	PRA1 family protein	Praf2	A0A0G2JTX2_RAT	-0.0459
1362	X-prolyl aminopeptidase (Aminopeptidase P) 1, soluble, isoform CRA_a	Xpnpep1	A0A0G2JV31_RAT	-0.0858
		LOC1083		
1363	Glutathione S-transferase alpha-3	48061	A0A0G2JVT2_RAT	0.0334
1364	Methyl-CpG-binding protein 2	Mecp2	A0A0G2JWK2_RAT	-0.2315
1365	GrpE protein homolog	Grpel1	A0A0G2JZA2_RAT	0.0197
1366	Protein CDV3 homolog	Cdv3	A0A0G2K0B0_RAT	-0.0226
1367	Voltage-dependent calcium channel subunit alpha-2/delta-2	Cacna2d2	A0A0G2K0J2_RAT	0.0971
1368	Tenascin C	Tnc	A0A0G2K1L0_RAT	0.1793
1369	Serine/arginine repetitive matrix 2	Srrm2	A0A0G2K2M9_RAT	-0.5008
1370	Glutaredoxin-3	Glr3	A0A0G2K5P8_RAT	0.0747
1371	Ras homolog family member T1	Rhot1	A0A0G2K777_RAT	-0.0860
1372	Threonine--tRNA ligase, cytoplasmic	Tars	A0A0G2K9V6_RAT	0.2646
1373	WAS protein family, member 3	Wasf3	A0A0U1RRZ0_RAT	-0.1045
1374	Elongin-B	Elob	A0A140TA99_RAT	-0.2003
1375	Aspartyl-tRNA synthetase	Dars	A9CMB7_RAT	0.2728
1376	ATP-binding cassette sub-family D member 3	Abcd3	ABCD3_RAT	-0.1200
1377	Monoacylglycerol lipase ABHD12	Abhd12	ABD12_RAT	0.1389
1378	Beta-arrestin-1	Arrb1	ARRB1_RAT	-0.0821
1379	SH3 domain binding glutamic acid-rich protein-like 3	Sh3bgrl3	B2RZ27_RAT	-0.1475
1380	Pdk3 protein	Pdk3	B5DFI9_RAT	-0.1399
1381	Glutathione S-transferase kappa	Gstk1	B6DYQ0_RAT	0.0948

1382	DEAD-box helicase 6	Ddx6	D3ZD73_RAT	-0.2277
1383	Catechol-O-methyltransferase domain containing 1 (Predicted), isoform CRA_a	Comtd1	D3ZM21_RAT	0.0772
1384	Cleavage and polyadenylation specific factor 6, 68kDa (Predicted), isoform CRA_b	Cpsf6	D3ZPL1_RAT	0.1135
1385	Myeloid leukemia factor 2	Mlf2	D3ZPN3_RAT	0.4845
1386	Adenosylhomocysteinase	Ahcyl2	D3ZWL6_RAT	-0.1481
1387	Mitochondrial ribosomal protein L12	Mrpl12	D3ZXF9_RAT	0.0860
1388	Purine-rich element-binding protein G	Purg	D3ZYS1_RAT	0.1046
1389	Peptidylprolyl isomerase	Fkbp2	D3ZZR9_RAT	-0.2105
1390	Vacuolar protein sorting 13 homolog C	Vps13c	D4A4K4_RAT	0.3832
1391	Ubiquilin 2	Ubqln2	D4AA63_RAT	-0.2553
1392	N(G),N(G)-dimethylarginine dimethylaminohydrolase 2	Ddah2	DDAH2_RAT	-0.0569
1393	Spliceosome RNA helicase Ddx39b	Ddx39b	DX39B_RAT	-0.1515
1394	Eukaryotic translation initiation factor 3 subunit B	Eif3b	EIF3B_RAT	-0.3622
1395	Elongin-C	Eloc	ELOC_RAT	-0.0825
1396	Cell cycle and apoptosis regulator 2	Ccar2	F1LM55_RAT	0.1925
1397	Elongation factor Tu GTP-binding domain-containing 2	Eftud2	F1LM66_RAT	-0.1083
1398	Regulator of G-protein signaling 17 (Predicted), isoform CRA_a	Rgs17	F1M0G0_RAT	0.0988
1399	EPM2A-interacting protein 1	Epm2aip1	F1M471_RAT	-0.0010
1400	2-oxoisovalerate dehydrogenase subunit alpha	Bckdha	F7EV94_RAT	-0.0443
1401	Glutamate carboxypeptidase 2	Folh1	FOLH1_RAT	-0.1579
1402	Serine and arginine-rich-splicing factor 4	Srsf4	G3V798_RAT	-0.1772

1403	Phosphoinositide phospholipase C	Plcg1	G3V845_RAT	-0.3891
1404	Sorting nexin family member 27, isoform CRA_b	Snx27	G3V8U4_RAT	0.1542
1405	Eukaryotic translation initiation factor 5A-1	Eif5a	IF5A1_RAT	-0.2173
1406	Calcium/calmodulin-dependent protein kinase type IV	Camk4	KCC4_RAT	-0.5186
1407	Kinesin-1 heavy chain	Kif5b	KINH_RAT	-0.0811
1408	RNA-binding motif protein 14	Rbm14	M0R3R6_RAT	0.0596
1409	Mitochondrial ribosomal protein S36	Mrps36	M0R776_RAT	0.0924
1410	Unconventional myosin-Id	Myo1d	MYO1D_RAT	-0.0823
1411	Xaa-Pro dipeptidase	Pepd	PEPD_RAT	0.1000
1412	Geranylgeranyl transferase type-2 subunit alpha	Rabggta	PGTA_RAT	0.1071
1413	Phospholipase A-2-activating protein	Plaa	PLAP_RAT	-0.2399
1414	Oligodendrocytic myelin paranodal and inner loop protein	Opalin	Q56A26_RAT	-0.1931
1415	Target of myb1 homolog (Chicken)	Tom1	Q5XI21_RAT	0.3145
1416	Glutamine--tRNA ligase	Qars	Q66H61_RAT	-0.0980
1417	G3BP stress granule assembly factor 2	G3bp2	Q6AY21_RAT	-0.2134
1418	Annexin	Anxa7	Q6IRJ7_RAT	0.0209
1419	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6	Psmd6	Q6PCT9_RAT	0.0443
1420	60S ribosomal protein L23	Rpl23	RL23_RAT	-0.0284
1421	Thimet oligopeptidase	Thop1	THOP1_RAT	-0.0686
1422	Mitochondrial import inner membrane translocase subunit Tim9	Timm9	TIM9_RAT	0.1974
1423	Mitochondrial import receptor subunit	Tomm40	TOM40_RAT	0.4274

TOM40 homolog				
1424	AP-1 complex subunit mu-1	Ap1m1	AP1M1_RAT	-0.0717
1425	EH domain-containing protein 1	Ehd1	EHD1_RAT	0.0466
1426	Inactive hydroxysteroid dehydrogenase-like protein 1	Hsdl1	HSDL1_RAT	0.2523
1427	Leucine-rich repeat-containing protein 59	Lrrc59	LRC59_RAT	-0.1234
1428	Cation-dependent mannose-6-phosphate receptor	M6pr	MPRD_RAT	-0.0303
1429	Proteasome subunit beta type-7	Psmb7	PSB7_RAT	0.0015
1430	Retinaldehyde binding protein 1 (Predicted), isoform CRA_a	Rlbp1	D3Z956_RAT	-0.2758
1431	DEAD-box helicase 17	Ddx17	E9PT29_RAT	-0.2721
1432	Similar to KIAA1549 protein	RGD1306271	D3Z9D0_RAT	0.0596
1433	RAN-binding protein 1	Ranbp1	D4A2G9_RAT	-0.1184
1434	Protein SGT1 homolog	Sugt1	SGT1_RAT	-0.0419
1435	Solute carrier family 2, facilitated glucose transporter member 1	Slc2a1	A0A0G2K2S2_RAT	-0.1576
1436	Sperm-associated antigen 9	Spag9	A0A0G2K6E8_RAT	-0.2017
1437	Zinc finger, C2HC-type-containing 1A	Zc2hc1a	A0A0G2K782_RAT	-0.2454
1438	Acylphosphatase-2	Acyp2	ACYP2_RAT	0.2383
1439	Dynactin 6 (Predicted), isoform CRA_b	Dctn6	D4ADD8_RAT	0.0606
1440	Integrin subunit alpha 6	Itga6	G3V667_RAT	-0.3376
1441	Leucine zipper putative tumor suppressor 3	Lzts3	G3V8V8_RAT	0.1808
1442			R9PXZ8_RAT	-0.0839
1443	Inosine triphosphate pyrophosphatase	Itpa	ITPA_RAT	0.1338
1444	Coiled-coil domain-containing 177	Ccdc177	D4A8V2_RAT	0.1482

1445	BCL2-like 13	Bcl2l13	D3ZT71_RAT	0.1388
1446	Prefoldin subunit 2	Pfdn2	PFD2_RAT	0.0832
1447	Farnesyl pyrophosphate synthase	Fdps	A0A0G2JXT3_RAT	0.1235
1448	Vacuolar protein sorting-associated protein 45	Vps45	VPS45_RAT	0.2128
1449	Cd200 molecule	Cd200	A0A5D0_RAT	-0.0304
1450	Nucleolar and coiled-body phosphoprotein 1	Nolc1	FILPS3_RAT	0.2769
1451	RCG40132, isoform CRA_a	Sez6l2	D4A6P1_RAT	-0.1329
1452	Disks large-associated protein 1	Dlgap1	DLGP1_RAT	0.1138
1453	unkown		FILNE7_RAT	-0.0433
1454	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	Ndufa5	NDUA5_RAT	0.0628
1455	Sorting nexin-3	Snx3	SNX3_RAT	-0.2129
1456	Activated RNA polymerase II transcriptional coactivator p15	Sub1	TCP4_RAT	-0.0141
1457	Secretory carrier-associated membrane protein	Clk2	A0A0G2K5Q8_RAT	-0.0539
1458	Formin-binding protein 1	Fnbp1	F1LZF2_RAT	-0.1479
1459	NADH-ubiquinone oxidoreductase chain 2	ND2	D2E6P4_RAT	-0.2605
1460	Oligoribonuclease, mitochondrial	Rexo2	A0A0G2K038_RAT	0.0353
1461	DIRAS family GTPase 1	Diras1	D4A304_RAT	0.1718
1462	Synaptogyrin-1	Syngn1	A0A0G2K3P9_RAT	0.0189
1463	V-type proton ATPase subunit G	Atp6v1g1	B2GUV5_RAT	-0.1904
1464	Syntaxin 4A (Placental), isoform CRA_a	Stx4	G3V8I4_RAT	-0.3876
1465	Fatty acid-binding protein, brain	Fabp7	FABP7_RAT	0.1648
1466	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14	Psmd14	Q4V8E2_RAT	0.0129

1467	Mannose-6-phosphate isomerase	Mpi	MPI_RAT	0.2918
1468	Calsyntenin-1	Clstn1	CSTN1_RAT	-0.0464
1469	Pituitary adenylate cyclase-activating polypeptide type I receptor	Adcyap1r1	PACR_RAT	0.0527
1470	RCG33340	Rpl23a	B5DES1_RAT	-0.1784
1471	Protein arginine N-methyltransferase 5	Prmt5	D4A0E8_RAT	0.1401
1472	Eukaryotic translation initiation factor 5	Eif5	IF5_RAT	-0.1083
1473	G protein-coupled receptor, class C, group 5, member B	Gprc5b	A0A0G2K4B0_RAT	-0.3987
1474	KH domain-containing, RNA-binding, signal transduction-associated protein 1	Khdrbs1	KHDR1_RAT	-0.0967
1475	Citramalyl-CoA lyase, mitochondrial	Clybl	CLYBL_RAT	-0.2606
1476	Intersectin 2	Itsn2	M0R7A6_RAT	-0.0241
1477	Oxysterol-binding protein	Osbpl8	A0A0G2JXN8_RAT	0.5766
1478	Furry-like protein	Fry	C0IXW5_RAT	0.0064
1479	Vacuolar protein sorting 13 homolog D	Vps13d	A0A0G2JYD4_RAT	0.1011
1480	Uncharacterized protein	N/A	F1M9V3_RAT	-0.0047
1481	Filamin B	Flnb	A0A0G2JXT8_RAT	-0.5302
1482	Plectin	Plec	PLEC_RAT	0.1206
1483	Cytoplasmic dynein 2 heavy chain 1	Dync2h1	D3ZBB8_RAT	0.1076
1484	Metaxin 1	Mtx1	A0A0G2JU49_RAT	0.0063
1485	Heterogeneous nuclear ribonucleoprotein U-like 1	Hnrnpul1	D4A962_RAT	0.3854
1486	Integrin-linked protein kinase	Ilk	ILK_RAT	-0.5577
1487	6-phosphogluconolactonase	Pgls	6PGL_RAT	0.5012
1488	Neuroendocrine protein 7B2	Scg5	7B2_RAT	0.1568

	Fragile X mental retardation syndrome-related			
1489	protein 1	Fxr1	A0A0G2JWD2_RAT	-0.0075
1490	Uncharacterized protein	N/A	A0A0G2JZ27_RAT	-0.2129
1491	RAP1 GTPase-activating protein 2	Rap1gap2	A0A0G2K0S7_RAT	0.1747
1492	Immunity-related GTPase Q	Irgq	A0A0G2K1U9_RAT	0.0908
1493	Oxysterol-binding protein	Osbpl1a	A0A0G2K327_RAT	-0.0715
1494	Dual-specificity phosphatase 3	Dusp3	A0A0G2K3I9_RAT	-0.0501
1495	TRAF2 and NCK-interacting kinase	Tnik	A0A0G2K490_RAT	-0.0488
	DnaJ heat shock protein family (Hsp40)			
1496	member A3	Dnaja3	A0A0G2K5E4_RAT	-0.0169
1497	T-complex 11-like 1	Tcp11l1	A0A0G2K6F1_RAT	-0.2714
		LOC1003		
1498	Protein arginine methyltransferase 1-like	61025	A0A0G2K9I8_RAT	-0.1094
	Vacuolar protein sorting-associated protein 28			
1499	homolog	Vps28	A0A0H2UHM0_RAT	0.0292
1500	Serine/threonine-protein kinase BRSK2	Brsk2	BRSK2_RAT	0.1248
	Coiled-coil and C2 domain-containing protein			
1501	1A	Cc2d1a	C2D1A_RAT	0.3849
1502	Copine-7	Cpne7	CPNE7_RAT	-0.3009
1503	Crk-like protein	Crkl	CRKL_RAT	-0.0045
1504	Phosphoglucomutase 2-like 1	Pgm2l1	D3Z955_RAT	-0.1809
1505	Uncharacterized protein	N/A	D3ZIP8_RAT	0.0563
1506	Sodium/hydrogen exchanger	Slc9a6	D3ZJ86_RAT	0.0300
1507	Tripartite motif-containing protein 2	Trim2	D3ZM62_RAT	-0.2117
1508	Leucine-rich repeat LGI family, member 3	Lgi3	D3ZN61_RAT	-0.0314
1509	Ubiquitin-conjugating enzyme E2M	Ube2m	D3ZNQ6_RAT	0.1042
1510	Phosphohistidine phosphatase 1	Phpt1	D3ZP47_RAT	-0.0587

1511	Endonuclease G-like 1 (Predicted), isoform CRA_d	Exog	D3ZTW9_RAT	0.0176
1512	Syntaxin-binding protein 5-like	Stxbp5l	D3ZU84_RAT	-0.1089
1513	Prolyl endopeptidase-like	Prepl	D3ZZ32_RAT	-0.2433
1514	Vacuolar protein sorting 13 homolog A	Vps13a	D4A899_RAT	0.0697
1515	Dishevelled associated activator of morphogenesis 1 (Predicted)	Daam1	D4ABM3_RAT	-0.4838
1516	Importin 7	Ipo7	D4AE96_RAT	-0.4708
1517	Serine/threonine-protein kinase DCLK2	Dclk2	DCLK2_RAT	0.1004
1518	DnaJ homolog subfamily B member 11	Dnajb11	DJB11_RAT	-0.2988
1519	Dynein light chain roadblock-type 1	Dynlrb1	DLRB1_RAT	0.0319
1520	Striatin-3	Strn3	E9PT82_RAT	0.0472
1521	Elongation factor Ts, mitochondrial	Tsfm	EFTS_RAT	-0.0490
1522	Erlin-2	Erlin2	ERLN2_RAT	-0.0081
1523	S-formylglutathione hydrolase	Esd	ESTD_RAT	-0.3854
1524	unkown		F1LNG7_RAT	0.3457
1525	Calcium/calmodulin-dependent protein kinase kinase 2	Camkk2	F1LPT4_RAT	0.0959
1526	Epsin-2	Epn2	F1LQ45_RAT	-0.1941
1527	Isoleucine-tRNA synthetase (Predicted)	Iars	F1LS86_RAT	0.1722
1528	unkown		F1LW01_RAT	-0.2368
1529	LIM and calponin homology domains 1	Limch1	F1M392_RAT	0.1329
1530	SLIT-ROBO Rho GTPase-activating protein 3	Srgap3	F1M5M9_RAT	-0.0687
1531	Tyrosine-protein phosphatase non-receptor type 23	Ptpn23	F1M951_RAT	0.3647
1532	DOMON domain-containing protein FRRS1L	Frrs1l	FRS1L_RAT	-0.1583

1533	SPARC-like 1 (Mast9, hevin), isoform CRA_a	Sparcl1	G3V7X5_RAT	-0.2975
1534	Hemoglobin subunit beta-2	N/A	HBB2_RAT	0.3851
1535	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial	Hibch	HIBCH_RAT	0.1782
1536	Eukaryotic initiation factor 4A-III	Eif4a3	IF4A3_RAT	0.0868
1537	Junctional adhesion molecule C	Jam3	JAM3_RAT	0.1758
1538	Casein kinase I isoform delta	Csnk1d	KC1D_RAT	-0.3919
1539	RCG60635, isoform CRA_b	Snrpd3	M0R907_RAT	-0.1191
1540	U5 small nuclear ribonucleoprotein 200 kDa helicase	Snrnp200	M3ZCQ2_RAT	-0.0054
1541	Omega-amidase NIT2	Nit2	NIT2_RAT	-0.1865
1542	OCIA domain-containing protein 1	Ociad1	OCAD1_RAT	-0.2851
1543	Protein phosphatase 1E	Ppm1e	PPM1E_RAT	-0.1368
1544	Proteasome subunit alpha type-3	Psm3	PSA3_RAT	-0.3359
1545	RBR-type E3 ubiquitin transferase	Rnf14	Q3ZAU6_RAT	0.2248
1546	1-acyl-sn-glycerol-3-phosphate acyltransferase	Agpat1	Q6MG85_RAT	-0.0323
1547	Phosphodiesterase	Pde1a	Q9EPR9_RAT	-0.4581
1548	unkown		R9PXW2_RAT	-0.2619
1549	60S ribosomal protein L10a	Rpl10a	RL10A_RAT	-0.0407
1550	60S ribosomal protein L30	Rpl30	RL30_RAT	-0.1333
1551	NAD-dependent protein deacylase sirtuin-5, mitochondrial	Sirt5	SIR5_RAT	-0.0262
1552	Arginine--tRNA ligase, cytoplasmic	Rars	SYRC_RAT	0.1864
1553	Deubiquitinating protein VCIP135	Vcpi1	VCIP1_RAT	-0.0704
1554	Zinc transporter 3	Slc30a3	ZNT3_RAT	0.1731

1555	Carbonyl reductase [NADPH] 1-like	Cbr1	A0A0G2JSV2_RAT	0.3219
1556	RCG36946	Rap2a	A0A0G2JTW1_RAT	0.4766
1557	Interleukin enhancer-binding factor 3	Ilf3	A0A0G2K2T6_RAT	0.3240
1558	Tetratricopeptide repeat, ankyrin repeat and coiled-coil-containing 2	Tanc2	A0A0G2K9J0_RAT	-0.2457
1559	DDHD domain-containing 2	Ddhd2	D3ZJ91_RAT	-0.2948
1560	Tetratricopeptide repeat, ankyrin repeat and coiled-coil-containing 2	Tanc2	D3ZWT6_RAT	0.0153
1561	Prefoldin subunit 4	Pfdn4	M0R5N4_RAT	-0.2821
1562	Regulator of G-protein signaling 7-binding protein	Rgs7bp	R7BP_RAT	0.1586
1563	Sodium-coupled neutral amino acid transporter 3	Slc38a3	S38A3_RAT	0.1121
1564	Twinfilin-1	Twf1	TWF1_RAT	-0.0499
1565	Tricarboxylate transport protein, mitochondria	Slc25a1	TXTP_RAT	0.0596
1566	Protein tweety homolog	Ttyh3	A0A0G2K0W3_RAT	0.1966
1567	Caprin-1	Caprin1	A0A0G2K8H0_RAT	-0.0266
1568	Ptges3 protein	Ptges3	B2GV92_RAT	-0.0830
1569	Ras-specific guanine nucleotide-releasing factor 2	Rasgrf2	RGRF2_RAT	0.3803
1570	RAB23, member RAS oncogene family	Rab23	D3ZRM5_RAT	0.1992
1571	Cytoplasmic aconitate hydratase	Aco1	G3V6S2_RAT	-0.1227
1572	Nuclear distribution protein nudE-like 1	Ndel1	NDEL1_RAT	0.1170
1573	DnaJ (Hsp40) homolog, subfamily C, member 11	Dnajc11	B1WBY5_RAT	0.5093
1574	RIMS-binding protein 2	Rimbp2	D4A2L1_RAT	0.0747
1575	Nectin cell adhesion molecule 1	Nectin1	F1LNP8_RAT	-0.0402

1576	Thioredoxin domain containing 13	Tmx4	G3V912_RAT	0.2199
1577	Mitochondrial glutamate carrier 2	Slc25a18	GHC2_RAT	0.2958
1578	Non-specific serine/threonine protein kinase	Cdc42bpa	G3V6C9_RAT	-0.0359
1579	MAGUK p55 subfamily member 3	Mpp3	MPP3_RAT	0.3092
1580	Diablo-like	LOC100360 940	D4A7Z5_RAT	-0.1219
1581	COP9 signalosome complex subunit 3	Cops3	CSN3_RAT	0.1645
1582	Sterile alpha and TIR motif containing 1 (Predicted)	Sarm1	D3ZUM2_RAT	-0.2114
1583	Translationally-controlled tumor protein	Tpt1	TCTP_RAT	-0.1736
1584	unkown		F1LNY0_RAT	-0.0941
1585	Sterile alpha and TIR motif containing 1 (Predicted)	Sarm1	B5DFJ4_RAT	0.3946
1586	Elongator complex protein 1	Elp1	ELP1_RAT	0.1199
1587	MAP7 domain-containing 1	Map7d1	D4A644_RAT	-0.1646
1588	Sperm antigen with calponin homology and coiled-coil domains 1	Specc1	A0A0G2K5D7_RAT	-0.0247
1589	Amyloid-beta A4 precursor protein-binding family B member 1	Apbb1	APBB1_RAT	0.3451
1590	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit beta isoform	Ppp2r5b	Q80W83_RAT	0.0925
1591	Kinesin light chain 2	Klc2	B2GV74_RAT	-0.0279
1592	Acetyl-CoA acetyltransferase 2-like 1	Acat2l1	A0A096MJY8_RAT	-0.1954
1593	Nedd4l	N/A	D7NIW0_RAT	0.1023
1594	SNAP-29 protein	Snap29	Q9JI56_RAT	-0.6685
1595	Disco-interacting protein 2 homolog A	Dip2a	A0A0G2KB74_RAT	-0.2831
1596	Similar to TRS85 homolog (Predicted)	Trappc8	F1M9W9_RAT	0.1021

1597	Nudcd3 protein	Nudcd3	Q32PY7_RAT	-0.0398
1598	Glycerol kinase	Gk	A0A0G2K785_RAT	0.2306
1599	ARP1 actin-related protein 1 homolog B		B2RYJ7_RAT	0.2262
1600	Enoyl-CoA delta isomerase 2, mitochondrial	Eci2	ECI2_RAT	0.0701
1601	Mitochondrial amidoxime reducing component 2	2-Mar	D3Z900_RAT	-0.2422
1602	Mitochondrial import inner membrane translocase subunit Tim13	Timm13	TIM13_RAT	0.3263
1603	Glycine cleavage system H protein, mitochondrial	Gcsh	GCSH_RAT	-0.1032
1604	Hexokinase-1	Hk1	M0RAQ6_RAT	-0.0221
1605	Sarcolemmal membrane-associated protein	Slmap	SLMAP_RAT	0.2063
1606	Eukaryotic translation initiation factor 4 gamma, 3	Eif4g3	A0A0G2JY73_RAT	0.2588
1607	Laminin subunit alpha 5	Lama5	F1MAN8_RAT	0.0606
1608	Calcium-transporting ATPase type 2C member 1	Atp2c1	AT2C1_RAT	0.1453
1609	Uncharacterized protein	N/A	F1M4I4_RAT	-0.0672
1610	Prickle planar cell polarity protein 2	Prickle2	F1M0J7_RAT	-0.0898
1611	RGD1562502 protein	RGD1562502	B2RYV5_RAT	0.2232
1612	NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 6 (Predicted)	Ndufb6	D3ZZ21_RAT	0.2834
1613	S-adenosylmethionine synthase	Mat2a	F1LRB8_RAT	-0.0280
1614	Calpain-5	Capn5	G3V7U6_RAT	-0.1291
1615	Glutathione reductase	Gsr	F1LRE1_RAT	0.1515
1616	DEAH (Asp-Glu-Ala-His) box polypeptide 15 (Predicted), isoform CRA_b	Dhx15	D3ZD97_RAT	0.1245

1617	Inositol polyphosphate 5-phosphatase OCRL-1	Ocrl	R9PXS2_RAT	0.0892
1618	Voltage-dependent N-type calcium channel subunit alpha-1B	Cacna1b	CAC1B_RAT	-0.0486
1619	Centrosomal protein 112	Cep112	D4ABV2_RAT	-0.7406
1620	Nucleoprotein TPR	Tpr	TPR_RAT	0.0726
1621	PH and SEC7 domain-containing protein 1	Psd	G3V8J5_RAT	-0.0973
1622	Phosphatidylinositol binding clathrin assembly protein, isoform CRA_a	Picalm	A0A0G2JTT2_RAT	-0.1635
1623	Abi1 protein	Abi1	A2VD09_RAT	-0.0579
1624	RALY heterogeneous nuclear ribonucleoprotein	Raly	Q5PQR0_RAT	-0.2338
1625	Large subunit ribosomal protein L36a, isoform CRA_a	Rpl36a	B2RYQ8_RAT	-0.5435
1626	Espin	Espn	ESPN_RAT	-0.2480
1627	NADH:ubiquinone oxidoreductase subunit A1	Ndufa1	G3V9S6_RAT	-0.3117
1628	Contactin-5	Cntn5	CNTN5_RAT	0.1340
1629	Neurocalcin-delta	Ncald	NCALD_RAT	-0.0500
1630	Thiamine-triphosphatase	Thtpa	THTPA_RAT	-0.3597
1631	Uncharacterized protein	Gigyf2	A0A096MJI4_RAT	0.5530
1632	DIS3-like exonuclease 1	Dis3l	DI3L1_RAT	0.5780
1633	Ankyrin repeat domain 26	Ankrd26	M0R3T8_RAT	-0.1602
1634	V-type proton ATPase 16 kDa proteolipid subunit	Atp6v0c	VATL_RAT	-0.7306
1635	ER membrane protein complex subunit 2	Emc2	A0A0A0MXU4_RAT	-0.0545
1636	Fatty aldehyde dehydrogenase	Aldh3a2	A0A0G2JY43_RAT	0.1433
1637	Tumor protein D52	Tpd52	A0A0G2K865_RAT	0.2579

1638	Long-chain-fatty-acid--CoA ligase 3	Acs13	ACSL3_RAT	0.1738
1639	Alpha-tubulin N-acetyltransferase 1	Atat1	ATAT_RAT	0.3761
1640	Agpat3 protein	Agpat3	B0BNL8_RAT	0.0236
1641	CDC42 effector protein (Rho GTPase binding) 4 (Predicted), isoform CRA_a	Cdc42ep4	B1WC33_RAT	-0.3437
1642	Alpha-tubulin N-acetyltransferase 1	Atat1	B2GUV2_RAT	-0.2362
1643	ARVCF, delta catenin family member	Arvcf	B4F7F3_RAT	0.1872
1644	Calponin-3	Cnn3	CNN3_RAT	-0.1160
1645	Coatomer subunit delta	Arcn1	COPD_RAT	-0.3320
1646	ARFGEF family member 3	Arfgef3	D3ZF86_RAT	0.2555
1647	Similar to RIKEN cDNA 2310022B05	RGD15598 96	D3ZY47_RAT	0.2058
1648	Receptor expression-enhancing protein	Reep1	D4A193_RAT	0.2253
1649	Ankyrin repeat and FYVE domain-containing 1	Ankfy1	D4A1J6_RAT	-0.1236
1650	Multivesicular body subunit 12B	Mvb12b	D4A732_RAT	-0.3326
1651	Signal recognition particle subunit SRP72	LOC108348 180	D4A7R0_RAT	-0.1248
1652	Rab3 GTPase-activating protein non-catalytic subunit	Rab3gap2	D4ABP4_RAT	0.0778
1653	Disks large-associated protein 4	Dlgap4	DLGP4_RAT	-0.1301
1654	Enhancer of mRNA-decapping protein 4	Edc4	EDC4_RAT	-0.5124
1655	Eukaryotic translation initiation factor 3 subunit I	Eif3i	EIF3I_RAT	-0.0299
1656	Mitogen-activated protein kinase kinase 4	Map2k4	F1LP57_RAT	0.0684
1657	Abl-interactor 2	Abi2	F1LYA6_RAT	0.3618
1658	Serine/threonine-protein phosphatase 2A 56	Ppp2r5d	F1MAA3_RAT	-0.1002

kDa regulatory subunit				
1659	COP9 signalosome subunit 5	Cops5	F7EUU4_RAT	0.0439
1660	Protein FAM131B	Fam131b	F8WFH6_RAT	0.0514
1661	Fatty acid-binding protein, heart	Fabp3	FABPH_RAT	0.3064
1662	Glyoxalase domain-containing protein 4	Glod4	GLOD4_RAT	0.3219
1663	Ig gamma-2B chain C region	Igh-1a	IGG2B_RAT	-0.3109
1664	Protein LYRIC	Mtdh	LYRIC_RAT	-0.0307
1665	Glycerol-3-phosphate phosphatase	Pgp	PGP_RAT	-0.0668
1666	60S ribosomal protein L27	Rpl27	RL27_RAT	-0.1386
1667	Sorting nexin-1	Snx1	SNX1_RAT	-0.1702
1668	WD repeat-containing protein 44	Wdr44	WDR44_RAT	-0.0952
1669	Fermitin family member 2	Fermt2	A0A0G2JWC7_RAT	-0.2211
1670	Rho guanine nucleotide exchange factor 7	Arhgef7	A0A0G2QC21_RAT	-0.2207
1671	Set protein	Set	B0BMV1_RAT	-0.0237
1672	Cytochrome b5	Cyb5a	CYB5_RAT	0.0838
1673	Methionine aminopeptidase	Metap1	D3ZE72_RAT	-0.2792
1674	Cytoskeleton-associated protein 4	Ckap4	D3ZH41_RAT	-0.1667
1675	Delta-1-pyrroline-5-carboxylate synthase	Aldh18a1	D3ZIE9_RAT	0.3031
1676	RCG61762, isoform CRA_d	Srsf7	D4A720_RAT	0.0243
1677	Echinoderm microtubule-associated protein-like 1	Eml1	EMAL1_RAT	-0.1140
1678	La ribonucleoprotein domain family, member 1	Larp1	F1M062_RAT	-0.3331
1679	MOB-like protein phoccin	Mob4	PHOCN_RAT	-0.1368
1680	Inactive phospholipase C-like protein 1	Plcl1	PLCL1_RAT	-0.1213

1681	Ras-related protein Rab-3B	Rab3b	RAB3B_RAT	-0.2433
1682	Regulator of microtubule dynamics protein 3	Rmdn3	RMD3_RAT	0.0227
1683	Serine/arginine-rich splicing factor 2	Srsf2	SRSF2_RAT	-0.4511
1684	Moesin	Msn	A0A096MK30_RAT	-0.0727
1685	Uncharacterized protein	N/A	A0A0G2K6L6_RAT	-0.0437
1686	Volume-regulated anion channel subunit LRRC8A	Lrrc8a	LRC8A_RAT	0.0759
1687	Diphosphoinositol polyphosphate phosphohydrolase 1	Nudt3	NUDT3_RAT	0.2145
1688	RuvB-like 1	Ruvbl1	RUVB1_RAT	-0.0400
1689	Phosphoribosylformylglycinamide synthase	Pfas	A0A0G2JTN4_RAT	-0.6064
1690	Cellular nucleic acid-binding protein	Cnbp	CNBP_RAT	-0.0928
1691	Leucine-rich repeat flightless-interacting protein 2	Lrrfip2	LRRF2_RAT	0.2478
1692	Transmembrane protein 163	Tmem163	TM163_RAT	0.0069
1693	BRICK1, SCAR/WAVE actin-nucleating complex subunit	Brk1	D3ZUP5_RAT	0.1799
1694	60S ribosomal protein L26	Rpl26	G3V6I9_RAT	0.0093
1695	Polyadenylate-binding protein	Pabpc4	G3V9N0_RAT	-0.0007
1696	Eukaryotic translation initiation factor 2 subunit beta	Eif2s2	Q6P685_RAT	-0.0541
1697	FLII, actin-remodeling protein	Flii	Q5RKI5_RAT	0.0066
1698	Protein phosphatase 1 regulatory subunit 1B	Ppp1r1b	PPR1B_RAT	-0.1573
1699	Phenylalanyl-tRNA synthetase subunit beta	Farsb	Q68FT7_RAT	0.2914
1700	Ilf2 protein	Ilf2	B2RZC6_RAT	0.4087
1701	Glycylpeptide N-tetradecanoyltransferase 1	Nmt1	NMT1_RAT	-0.2221
1702	ENAH, actin regulator	Enah	A0A0G2K6I4_RAT	0.0728

1703	Microsomal glutathione S-transferase 3	Mgst3	D4ADS4_RAT	-0.8339
1704	SAR1 gene homolog A (<i>S. cerevisiae</i>), isoform CRA_b	Sar1a	Q6AY18_RAT	0.0937
1705	Synaptojanin-2-binding protein	Synj2bp	SYJ2B_RAT	0.2959
1706	Adhesion G protein-coupled receptor L3	Adgrl3	AGRL3_RAT	0.1711
1707	Janus kinase and microtubule-interacting protein 2	Jakmip2	D3ZQE7_RAT	0.3178
1708	BTB domain-containing 17	Btbd17	D4A8L9_RAT	0.0124
1709	Rho GTPase-activating protein 23	Arhgap23	F1M2D4_RAT	-0.4211
1710	Signal-induced proliferation-associated 1 like 1, isoform CRA_b	Sipa111	A0A0G2KAW2_RA T	0.2616
1711	STE20/SPS1-related proline-alanine-rich protein kinase	Stk39	A0A0G2K007_RAT	-0.0648
1712	Dehydrogenase/reductase SDR family member 7B	Dhrs7b	DRS7B_RAT	0.2721
1713	Connector enhancer of kinase suppressor of ras 2	Cnksr2	CNKR2_RAT	0.0871
1714	Eukaryotic translation initiation factor 2 subunit 1	Eif2s1	IF2A_RAT	0.3309
1715	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 5 (Predicted), isoform CRA_a	Psmc5	G3V8G2_RAT	-0.0264
1716	Ube2l3 protein	Ube2l3	B2RZA9_RAT	0.2743
1717	NADH-cytochrome b5 reductase 3	Cyb5r3	NB5R3_RAT	0.2402
1718	Radixin	Rdx	Q5PQK5_RAT	-0.7045
1719	MYC-binding protein 2, E3 ubiquitin protein ligase	Mycbp2	D4A2D3_RAT	-0.2756
1720	NOVA alternative-splicing regulator 2	Nova2	F1M4H5_RAT	0.0394

1721	Proline dehydrogenase	Prodh1	F1MAR6_RAT	0.1451
1722	Parvalbumin alpha	Pvalb	PRVA_RAT	0.0129
1723	Ubiquitin carboxyl-terminal hydrolase CYLD	Cyld	CYLD_RAT	0.1022
1724	RuvB-like helicase	Ruvbl2	Q4QQS4_RAT	0.2703
1725	Charged multivesicular body protein 5	Chmp5	CHMP5_RAT	0.2318
1726	Acylglycerol kinase	Agk	D3Z9L0_RAT	0.0780
1727	Methylthioribose-1-phosphate isomerase	Mri1	MTNA_RAT	0.2594
1728	Cox7a2 protein	Cox7a2	B2RYS0_RAT	0.0612
1729	40S ribosomal protein S26	RGD15624 15	A0A0G2K743_RAT	-0.0377
1730	unkown		D4A786_RAT	0.0417
1731	Clathrin interactor 1	Clint1	Q6DGF2_RAT	0.3769
1732	RNA-binding protein with serine-rich domain 1	Rnps1	RNPS1_RAT	-0.0871
1733	Syndecan-4	Sdc4	SDC4_RAT	0.0471
1734	Focal adhesion kinase 1	Ptk2	A0A0G2KAT5_RAT	0.1319
1735	28 kDa heat- and acid-stable phosphoprotein	Pdap1	HAP28_RAT	0.1932
1736	Tubulin folding cofactor D	Tbcd	F1M1D5_RAT	0.1552
1737	Heterogeneous nuclear ribonucleoprotein H	Hnrnph1	A0A0G2JTG7_RAT	0.3084
1738	Phospholipid phosphatase 3	Plpp3	PLPP3_RAT	0.1254
1739	unkown		R9PXZ5_RAT	0.1023
1740	Synaptic functional regulator FMR1	Fmr1	A0A0G2JZV8_RAT	-0.0527
1741	Serine/threonine-protein kinase TAO1	Taok1	TAOK1_RAT	0.2106
1742	Armadillo repeat-containing protein 1	Armcl	B0BN83_RAT	0.2273
1743	Metallo-beta-lactamase domain-containing 2	Mblac2	D4A249_RAT	0.2311

1744	Leucine zipper transcription factor-like protein 1	Lztfl1	LZTL1_RAT	0.8193
1745	Ral GTPase-activating protein subunit alpha-1	Ralgapa1	RGPA1_RAT	-0.3177
1746	Nuclear protein localization protein 4 homolog	Nploc4	A0A0G2JU66_RAT	-0.3075
1747	unkown		D4A2X2_RAT	0.3805
1748	Laminin subunit beta 1	Lamb1	D3ZQN7_RAT	-0.0150
1749	Neogenin	Neo1	NEO1_RAT	0.2887
1750	Metallothionein-3	Mt3	MT3_RAT	0.0698
1751	Regulator of G-protein signaling 14	Rgs14	RGS14_RAT	-0.1226
1752	ADP-ribose pyrophosphatase, mitochondrial	Nudt9	NUDT9_RAT	0.2441
1753	Ubiquitin-like protein 4A	Ubl4a	UBL4A_RAT	-0.2081
1754	UBX domain protein 6	Ubxn6	A0A0G2K012_RAT	-0.1143
1755	Glutamate receptor ionotropic, kainate 3	Grik3	G3V9I2_RAT	0.1388
1756	40S ribosomal protein S15	Rps15	RS15_RAT	0.0123
1757	Acyl-coenzyme A thioesterase 2, mitochondrial	Acot2	ACOT2_RAT	0.4175
1758	Solute carrier family 17 (Sodium-dependent inorganic phosphate cotransporter), member	Slc17a6	G3V851_RAT	0.3303
1759	Potassium voltage-gated channel subfamily KQT member 2	Kcnq2	F1M6X3_RAT	-0.3672
1760	Protein MAL2-like	LOC100911027	M0RCJ9_RAT	0.2028
1761	Neural cell adhesion molecule 1	Ncam1	F1LUV9_RAT	-0.0215
1762	Glycine decarboxylase	Gldc	D4A5Q9_RAT	0.2706
1763	Collagen type VI alpha 1 chain	Col6a1	D3ZUL3_RAT	-0.1203
1764	Tnf receptor-associated factor 3	Traf3	A0A0G2K7X2_RAT	-0.2539

1765	Phospholipase D3	Pld3	PLD3_RAT	0.1146
1766	Heat shock factor-binding protein 1	Hsbp1	HSBP1_RAT	-0.1142
1767	60S ribosomal protein L32	Rpl32	RL32_RAT	0.0442
1768	Exocyst complex component 1	Exoc1	A0A0G2K2V5_RAT	0.0241
1769	NADH-ubiquinone oxidoreductase chain 4	Nd4	A7XYB9_RAT	0.0366
1770	Kinesin-like protein	Kif3a	A0A0G2JUD6_RAT	-0.3749
1771	Disabled homolog 2-interacting protein	Dab2ip	A0A0G2JTF2_RAT	-0.2950
1772	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin a2	Smarca2	Q6DUH4_RAT	-0.6409
1773	Complexin 3	Cplx3	D4ABY0_RAT	0.0631
1774	Phospholipid-transporting ATPase	Atp8a2	D4A3X6_RAT	-1.0855
1775	Non-specific serine/threonine protein kinase	Mark4	D4A6T9_RAT	0.6482
1776	Vacuolar protein sorting-associated protein 26A	Vps26a	VP26A_RAT	-0.1370
1777	Histone cluster 1 H1 family member c	Hist1h1c	A0A0G2K654_RAT	-0.1556
1778	DDB1 and CUL4-associated factor 7	Dcaf7	B2RZ68_RAT	0.3456
1779	RNA-binding protein EWS-like	LOC100912 481	A0A0G2K850_RAT	-0.2298
1780	Ubiquitin-specific peptidase 31	Usp31	A0A0G2K2V3_RAT	0.0395
1781	Exocyst complex component 2	Exoc2	EXOC2_RAT	-0.5396
1782	Similar to potassium channel tetramerisation domain-containing 12b	LOC681355	F1M1A6_RAT	0.1836
1783	Nuclear receptor coactivator 5	Ncoa5	D3ZEI6_RAT	-0.1935
1784	SWI/SNF-related, matrix-associated, actin-dependent regulator of chromatin, subfamily c, member 2	Smarcc2	D4A510_RAT	-0.5951
1785	Caytaxin	Atcay	ATCAY_RAT	0.0439

1786	SLIT-ROBO Rho GTPase-activating protein 2	Srgap2	A0A0G2JZ92_RAT	-0.0488
1787	Rho GTPase-activating protein 39	Arhgap39	F1LR18_RAT	-0.0807
1788	Kinesin-like protein	Kif3b	D3ZI07_RAT	0.2410
1789	NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 5 (Predicted), isoform CRA_b	Ndufb5	D4A565_RAT	0.0823
1790	Caseinolytic peptidase B protein homolog	Clpb	CLPB_RAT	-0.5817
1791	Triokinase/FMN cyclase	Tkfc	TKFC_RAT	0.4797
1792	Protein phosphatase 1H	Ppm1h	PPM1H_RAT	0.3003
1793	Nitric oxide synthase, brain	Nos1	D3ZEW7_RAT	0.2961
1794	Teneurin transmembrane protein 4	Tenm4	F1LZ38_RAT	-0.3604
1795	Neuron navigator 1	Nav1	D4A5I4_RAT	-0.1737
1796	NADH-ubiquinone oxidoreductase chain 3	ND3	A0A0A1FZ38_RAT	0.4141
1797	Regulating synaptic membrane exocytosis protein 2	Rims2	A0A096P6M3_RAT	-0.4876
1798	Coatmer protein complex, subunit epsilon (Predicted), isoform CRA_a	Cope	B1WBX7_RAT	-0.2654
1799	Coiled-coil domain-containing protein 22	Ccdc22	CCD22_RAT	0.8047
1800	Non-specific serine/threonine protein kinase	Mark2	A0A0G2K6X6_RAT	-1.2020
1801	Receptor protein serine/threonine kinase	Bmpr2	F1LQC5_RAT	-0.4595
1802	Small nuclear ribonucleoprotein U1 subunit 70	Snrnp70	B2RZ74_RAT	-0.3851
1803	Glyceraldehyde-3-phosphate dehydrogenase	N/A	M0R660_RAT	0.8175
1804	Stromal interaction molecule 1	Stim1	A0A0G2K5C8_RAT	-0.3206
1805	FAS-associated factor 2	Faf2	FAF2_RAT	-0.1880
1806	Leucine, glutamate and lysine-rich 1	Lekr1	F1M8S9_RAT	-0.0906
1807	Cannabinoid receptor 1	Cnr1	CNR1_RAT	-0.2163

1808	WD repeat-containing protein 81	Wdr81	WDR81_RAT	0.0026
1809	Centriolin	Cntrl	D4A619_RAT	-0.1075
1810	Proteasome subunit beta type	LOC100360 846	A0A0G2JSL0_RAT	0.0725
1811	Beta-globin	Hbb-b1	A0A0G2JTW9_RAT	-0.0585
1812	Syntaxin 16	Stx16	A0A0G2K528_RAT	-0.0767
1813	Histidine triad nucleotide-binding protein 3	Hint3	A0A0G2K7W8_RAT	0.0689
1814	SH3 domain-containing kinase-binding protein 1	Sh3kbp1	A0A0H2UHD8_RAT	-0.3250
1815	Nicalin	Ncln	A0A0H2UHD9_RAT	0.1501
1816	Rap2ip protein	Rap2ip	B0BMV0_RAT	-0.2202
1817	Pdxdp protein	Pdxdp	B2GV79_RAT	0.2823
1818	Sorting nexin 2	Snx2	B2RYP4_RAT	-0.1705
1819	Rics protein	Rics	B5DEI5_RAT	0.0374
1820	Biliverdin reductase B	Blvrb	B5DF65_RAT	0.1603
1821	Catalase	Cat	CATA_RAT	-0.0045
1822	Cyclin-dependent kinase-like 5	Cdkl5	D3ZG85_RAT	-0.5446
1823	LMBR1 domain-containing 2	Lmbrd2	D3ZUP8_RAT	-0.0578
1824	RCG43947	Txndc5	D3ZZC1_RAT	-0.0342
1825	Dynactin subunit 4	Dctn4	DCTN4_RAT	0.3010
1826	Trafficking protein particle complex 10	Trappc10	F1MAQ4_RAT	-0.2876
1827	RCG21137	Pgam5	G3V9N1_RAT	0.0268
1828	Protein kinase C and casein kinase substrate in neurons 3	Paccin3	G3V9N7_RAT	-0.2123
1829	Guanine nucleotide-binding protein G(k) subunit alpha	Gnai3	GNAI3_RAT	-0.1478

1830	Serine/threonine-protein kinase 24	Stk24	H9KVF3_RAT	0.0380
1831	Mitochondrial fission regulator 1-like	Mtfr1l	MFR1L_RAT	0.0887
1832	Nidogen-2	Nid2	NID2_RAT	0.1466
1833	Serine/threonine-protein phosphatase PP1-beta catalytic subunit	Ppp1cb	PP1B_RAT	0.2082
1834	Palmitoyl-protein thioesterase 1	Ppt1	PPT1_RAT	-0.2075
1835	LOC367586 protein	LOC367586	Q5M7V3_RAT	-0.3234
1836	Chromobox 3	Cbx3	Q5RJK5_RAT	0.0726
1837	ATPase family AAA domain-containing protein 1	Atad1	Q7TP35_RAT	-0.0577
1838	Ras-related protein Rap-1b	Rap1b	RAP1B_RAT	-0.0967
1839	Serine racemase	Srr	SRR_RAT	-0.2459
1840	Syntaxin-8	Stx8	STX8_RAT	-0.1710
1841	Mitochondrial import receptor subunit TOM22 homolog	Tomm22	TOM22_RAT	-0.1220
1842	Regulator of G-protein-signaling 6	Rgs6	A0A0G2JUG4_RAT	-0.1172
1843	Single-stranded DNA binding protein 1, isoform CRA_b	Ssbp1	A0A0G2K747_RAT	-0.3825
1844	WD repeat and FYVE domain-containing 3	Wdfy3	A0A0G2K9M4_RAT	-0.5732
1845	Protein ABHD16A	Abhd16a	ABHGA_RAT	-0.2398
1846	Proteasomal ubiquitin receptor ADRM1	Adrm1	ADRM1_RAT	-0.0489
1847	CLPTM1, transmembrane protein	Clptm1	B2RYF6_RAT	-0.0335
1848	Programmed cell death 5	Pdcd5	D4ADF5_RAT	0.1091
1849	Cadherin 10	Cdh10	F1LR98_RAT	0.2430
1850	ARP3 actin-related protein 3 homolog B	Actr3b	F1LY09_RAT	-0.0634
1851	Calumenin	Calu	G3V6S3_RAT	-0.3071

1852	Proline-rich transmembrane protein 1	Prpt1	PRRT1_RAT	0.2248
1853	Dead end homolog 1 (Zebrafish)	Hars	Q4QQV4_RAT	0.1158
1854	Cullin 2	Cul2	A0A0G2K761_RAT	-0.0637
1855	Arsb protein	Arsb	A0JPJ3_RAT	-0.0312
1856	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 7 (Predicted)	Psmc7	D4AEH3_RAT	0.3542
1857	Voltage-dependent calcium channel gamma-8 subunit	Cacng8	CCG8_RAT	0.9055
1858	Tubulin alpha-8 chain	Tuba8	TBA8_RAT	0.0491
1859	ZW10 interactor	Zwint	ZWINT_RAT	0.0208
1860	Eukaryotic translation initiation factor 3 subunit C	Eif3c	EIF3C_RAT	0.1413
1861	Peptidyl arginine deiminase, type II, isoform CRA_a	Padi2	F1LPA6_RAT	0.0558
1862	Peripherin	Prph	F1M7P4_RAT	0.2487
1863	Polypyrimidine tract-binding protein 2	Ptbp2	PTBP2_RAT	0.0486
1864	Collagen, type I, alpha 2	NEWGENE _621351	A0A0G2KAN1_RAT	0.1283
1865	Lupus La protein homolog	Ssb	LA_RAT	-0.1374
1866	Arfaptin-2	Arfp2	ARFP2_RAT	-0.0369
1867	A disintegrin and metallopeptidase domain 11 (Predicted), isoform CRA_a	Adam11	D4A6U1_RAT	-0.2018
1868	Cyclin-dependent kinase 16	Cdk16	A0A140UHY2_RAT	0.1597
1869	C-Jun-amino-terminal kinase-interacting protein 3	Mapk8ip3	E9PSK7_RAT	-0.1939
1870	Heterogeneous nuclear ribonucleoprotein F	Hnrnpf	HNRPF_RAT	-0.4153
1871	Solute carrier family 7 member 11	Slc7a11	D4ADU2_RAT	0.6232

1872	IST1 homolog	Ist1	IST1_RAT	0.2204
1873	AP complex subunit sigma	Ap1s1	B5DFI3_RAT	0.1058
1874	Transient receptor potential cation channel subfamily V member 2	Trpv2	TRPV2_RAT	-0.0532
1875	Myotubularin-related protein 1	Mtmr1	A0A0G2JUZ0_RAT	-0.1081
1876	Fatty-acid amide hydrolase 1	Faah	FAAH1_RAT	0.4596
1877	Small glutamine-rich tetratricopeptide repeat-containing protein beta	Sgtb	SGTB_RAT	-0.0235
1878	ATP-dependent (S)-NAD(P)H-hydrate dehydratase	Naxd	D3ZLK9_RAT	-0.1096
1879	Adipocyte plasma membrane-associated protein	Apmap	A0A0G2K6G2_RAT	0.2169
1880	ATP-sensitive inward rectifier potassium channel 10	Kcnj10	A0A0H2UHF5_RAT	-0.1533
1881	GTP-binding protein Rheb	Rheb	M0R3K1_RAT	0.1000
1882	Lysosome-associated membrane glycoprotein 1	Lamp1	LAMP1_RAT	-0.1757
1883	Sortilin-related VPS10 domain-containing receptor 2	Sorcs2	D3ZW09_RAT	0.0840
1884	D-aminoacyl-tRNA deacylase	Dtd1	B0K014_RAT	0.1722
1885	Glutamate receptor, metabotropic 5, isoform CRA_a	Grm5	B2CZC8_RAT	0.3586
1886	Protein piccolo	Pclo	F1M7V4_RAT	0.3131
1887	Glutathione S-transferase Mu 5	Gstm5	GSTM5_RAT	0.4492
1888	Phosphoacetylglucosamine mutase	Pgm3	B2RYN0_RAT	0.0836
1889	Oxidative-stress responsive 1 (Predicted)	Oxsr1	D3ZUC9_RAT	-0.0480
1890	Limb and neural patterns	Lnpg	A0JN29_RAT	0.0001
1891	Pleckstrin homology-like domain family B	Phldb1	A0A0G2JV32_RAT	-0.1881

	member 1			
1892	Uncharacterized protein	Cep170	A0A0G2K315_RAT	-0.1823
1893	Protocadherin 9	Pcdh9	F1LS01_RAT	0.0709
1894	Hydroxysteroid dehydrogenase-like protein 2	Hsd12	HSDL2_RAT	-0.0814
1895	RAB8B, member RAS oncogene family, isoform CRA_a	Rab8b	B0BMV5_RAT	0.3311
1896	Mitochondrial ribosomal protein S27	Mrps27	D4A3E8_RAT	-0.4002
1897	RAN GTPase-activating protein 1	Rangap1	F1MAA5_RAT	0.2698
1898	Alanine/serine/cysteine/threonine transporter 1	ratASCT1	A0A0F7R5I4_RAT	0.1733
1899	Isochorismatase domain-containing protein 1	LOC103694 869	F2Z3T7_RAT	0.1012
1900	Protein C10-like	LOC100911 713	D3ZMS0_RAT	-0.2513
1901	Lysosomal alpha-glucosidase	Gaa	LYAG_RAT	-0.2959
1902	Transglutaminase 2, C polypeptide	Tgm2	Q6P6R6_RAT	0.3866
1903	unkown		A0A0A0MXT7_RAT	-0.0920
1904	Reticulophagy regulator 2	Retreg2	A0A0G2K1U5_RAT	-0.1057
1905	PITH domain-containing 1	Pithd1	D4ABS5_RAT	-0.0132
1906	Metaxin 2	Mtx2	Q5U1Z9_RAT	-0.0806
1907	Ubiquitin-like modifier-activating enzyme 5	Uba5	UBA5_RAT	-0.1238
1908	Integrin subunit alpha V	Itgav	A0A0G2JVZ6_RAT	0.1812
1909	1,4-alpha-glucan-branching enzyme	Gbe1	A0A096MIX1_RAT	-0.1388
1910	C2 calcium-dependent domain-containing 5	C2cd5	A0A0G2K543_RAT	-0.3226
1911	Far upstream element-binding protein 1	Fubp1	A0A140TAJ3_RAT	-0.3704
1912	Translocase of inner mitochondrial membrane 8 homolog A1 (yeast)	Timm8a1	F1LP21_RAT	-0.2963

	Potassium voltage-gated channel subfamily D			
1913	member 2	Kcnd2	KCND2_RAT	0.2202
1914	Cadherin 11	Cdh11	F1MAH6_RAT	-0.1238
	Nascent polypeptide-associated complex			
1915	subunit alpha	Naca	M0R9L0_RAT	-0.1708
1916	Tankyrase 1-binding protein 1	Tnks1bp1	D3ZF26_RAT	-0.5817
1917	Aldehyde dehydrogenase X, mitochondrial	Aldh1b1	AL1B1_RAT	0.1834
1918	MAP6 domain-containing 1	Map6d1	D3ZT16_RAT	0.0847
1919	Armc8 protein	Armc8	B4F7A2_RAT	-0.1151
1920	ETHE1, persulfide dioxygenase	Ethe1	B0BNJ4_RAT	0.0816
1921	Striatin 4	Strn4	A0A0G2JX43_RAT	0.0726
	Katanin p60 ATPase-containing subunit			
1922	A-like 1	Katnal1	KATL1_RAT	-0.2516
1923	U2 snRNP auxiliary factor large subunit	U2af2	F2Z3T9_RAT	-0.0467
	Family with sequence similarity 171, member			
1924	B	Fam171b	D3ZTG3_RAT	-0.6580
1925	Serine/threonine-protein kinase PAK 2	Pak2	PAK2_RAT	0.1516
1926	Latexin	Lxn	LXN_RAT	0.0214
1927	60S ribosomal protein L17	Rpl17	A0A0H2UHQ1_RAT	-0.2357
1928	Glutamate receptor 1	Gria1	GRIA1_RAT	-0.2312
1929	Proteasome 26S subunit, non-ATPase 8	Psmc8	F1LMQ3_RAT	-0.1088
1930	Da1-12	N/A	Q7TP07_RAT	-0.1937
1931	Uncharacterized protein C16orf45 homolog	N/A	CP045_RAT	-0.2120
1932	Serine hydroxymethyltransferase	Shmt2	Q5U3Z7_RAT	0.0737
	3-phosphoinositide-dependent protein kinase			
1933	1	Pdpk1	PDPK1_RAT	0.1428
1934	Sorting nexin family member 30	Snx30	F1LMN8_RAT	-0.0771

1935	KH domain-containing, RNA-binding, signal transduction-associated protein 3	Khdrbs3	A0A0G2JUF2_RAT	0.1913
1936	ATP-binding cassette sub-family B member 7, mitochondrial	Abcb7	ABCB7_RAT	0.1840
1937	Ataxin-10	Atxn10	ATX10_RAT	-0.1466
1938	Kinase D-interacting substrate 220 isoform 2	Kidins220	A0A0H4SMZ8_RAT	-0.3087
1939	Guanine nucleotide-binding protein subunit gamma	Gng4	M0R809_RAT	-0.0227
1940	Translocon-associated protein subunit alpha	Ssr1	A0A0G2K075_RAT	-0.0689
1941	Ferritin	Fth1	A0JPM7_RAT	-0.1515
1942	Cystathionine beta-synthase	Cbs	CBS_RAT	-0.5831
1943	Coiled-coil domain-containing 6	Ccdc6	D4AEK9_RAT	0.1544
1944	Large proline-rich protein BAG6	Bag6	BAG6_RAT	-0.0066
1945	LUC7-like 2 (<i>S. cerevisiae</i>)	Luc7l2	B2RYP6_RAT	-0.3562
1946	Cytidine/uridine monophosphate kinase 2	Cmpk2	D3ZC63_RAT	-0.1463
1947	Adenylate kinase 5	Ak5	M0R7U1_RAT	-0.3058
1948	AP-1 complex subunit gamma	Ap1g1	B2RYN6_RAT	-0.2817
1949	CKLF-like MARVEL transmembrane domain-containing 4	Cmtm4	D4A110_RAT	0.0973
1950	RGD1563224 protein	Tmem65	A1L1L9_RAT	-0.3884
1951	Eukaryotic translation initiation factor 3, subunit 6 interacting protein	Eif3l	G3V7G9_RAT	-0.0110
1952	Ras-related protein Ral-B	Ralb	RALB_RAT	-0.0213
1953	Eukaryotic initiation factor 4A-II	Eif4a2	A0A0G2K8B7_RAT	0.2333
1954	Gamma-aminobutyric acid receptor subunit beta-3	Gabrb3	A0A0G2K5D4_RAT	-0.3511
1955	Serine/threonine-protein kinase PAK 3	Pak3	PAK3_RAT	-0.0687

1956	H2-K region expressed gene 2, rat orthologue	Pfdn6	Q6MGC4_RAT	-0.2778
1957	Phosphodiesterase	Pde4d	A0A140TAB1_RAT	0.0400
1958	Vesicle transport through interaction with t-SNAREs homolog 1A	Vti1a	F1LT41_RAT	0.0188
1959	Secretion-associated, Ras-related GTPase 1A	Sar1a	A0A0G2JUD2_RAT	-0.1333
1960	Unc-119 lipid-binding chaperone B	Mlec	A0A0G2K121_RAT	0.1625
1961	Alpha-mannosidase 2C1	Man2c1	F1LPQ3_RAT	0.3416
1962	Small G protein-signaling modulator 1	Sgsm1	D3ZAS2_RAT	-0.0779
1963	LOC683667 protein	Sri	B0BNJ1_RAT	-0.0343
1964	Fga protein	Fga	A1L114_RAT	0.0630
1965	L-2-hydroxyglutarate dehydrogenase	L2hgdh	D3ZVS2_RAT	-0.3081
1966	Transmembrane protein 35A	Tmem35a	TMM35_RAT	0.1781
1967	Non-histone chromosomal protein HMG-17	Hmgn2	HMGN2_RAT	0.0308
1968	IlvB (Bacterial acetolactate synthase)-like (Predicted), isoform CRA_c	Ilvbl	D4ACG2_RAT	0.2543
1969	Numb-like protein	Numbl	NUMBL_RAT	-0.4089
1970	Serine/threonine-protein kinase WNK1	Wnk1	A0A0G2K3A0_RAT	-0.1891
1971	Phosphoinositide phospholipase C	N/A	A6Y857_RAT	-1.0203
1972	CDGSH iron sulfur domain 3	Cisd3	A0A0G2JW34_RAT	0.0822
1973	Elongation factor G, mitochondrial	Gfm1	EFGM_RAT	-0.3125
1974	Evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial	Ecsit	ECSIT_RAT	-0.0787
1975	Inosine-5'-monophosphate dehydrogenase 2	Impdh2	IMDH2_RAT	0.2271
1976	Endophilin-B1	Sh3glb1	SHLB1_RAT	-0.4141
1977	RCG21454	Zbed5	D3ZTR5_RAT	0.2433
1978	Biliverdin reductase A	Blvra	BIEA_RAT	-0.3693

1979	Protein NDRG1	Ndrg1	NDRG1_RAT	-0.5386
1980	Synaptosomal-associated protein 47	Snap47	SNP47_RAT	0.6663
1981	MAP7 domain-containing 2	Map7d2	D4A4L4_RAT	-0.0612
1982	HECT domain E3 ubiquitin protein ligase 3	Hectd3	F1LVZ9_RAT	0.1648
1983	Serine/threonine-protein phosphatase	Ppp1cc	A0A0G2JVK2_RAT	-0.0962
1984	WNK lysine deficient protein kinase 2	Wnk2	A0A0G2KAS8_RAT	-0.0378
1985	Exocyst complex component 3	Exoc3	EXOC3_RAT	-0.2323
1986	Malignant T-cell-amplified sequence	Mcts1	A0A0G2K724_RAT	0.0826
1987	40S ribosomal protein S23	Rps23	RS23_RAT	0.0217
1988	Extracellular leucine-rich repeat and fibronectin type III domain-containing 2	Elfn2	D3ZH36_RAT	-0.0168
1989	Hemopexin	Hpx	HEMO_RAT	-0.1954
1990	NOP56 ribonucleoprotein	Nop56	Q4KLK7_RAT	-0.2515
1991	Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex	Dbt	B2GV15_RAT	-0.0022
1992	Similar to solute carrier family 25 (Mitochondrial carrier; phosphate carrier), member 23, isoform CRA_b	Slc25a23	M0R4V4_RAT	-0.0857
1993	Mitogen-activated protein kinase	Mapk9	A0A0G2JYS4_RAT	0.2276
1994	Haptoglobin	Hp	A0A0H2UHM3_RAT	-0.0843
1995	MAP6 domain-containing 1	Map6d1	D3ZMX6_RAT	-0.5974
1996	Uncharacterized protein	N/A	A0A0G2K5A4_RAT	0.1956
1997	Rho GTPase-activating protein 21	Arhgap21	F1LXQ7_RAT	-0.8601
1998	Secretogranin-1	Chgb	SCG1_RAT	0.3202
1999	WW domain binding protein 2, isoform CRA_b	Wbp2	G3V721_RAT	0.5605

	Alpha-2-macroglobulin receptor-associated protein	Lrpap1	AMRP_RAT	0.3022
2001	Protein THEM6	Them6	THEM6_RAT	-0.4110
2002	Uncharacterized protein	N/A	A0A0G2K9Q7_RAT	0.3162
2003	Myeloid-associated differentiation marker	Myadm	MYADM_RAT	-0.1095
2004			R9PXW8_RAT	-0.0894
2005	HEAT repeat-containing protein 1	Heatr1	D3ZL86_RAT	-0.4065
2006	Myosin IXA, isoform CRA_a	Myo9a	F1LMQ1_RAT	-0.8912
2007	Alanine aminotransferase 1	Gpt	ALAT1_RAT	-0.5996
2008	RNA-binding motif protein 26	Rbm26	D3ZRC3_RAT	0.4320
2009	Annexin A2	Anxa2	ANXA2_RAT	0.5444
2010	unkown		F1M742_RAT	0.6813
2011	Transforming, acidic coiled-coil-containing protein 2	Tacc2	A0A0G2K598_RAT	0.0912
2012	Small nuclear ribonucleoprotein polypeptide E	Snrpe	D3ZSP1_RAT	-0.1814
2013	Phospholipase	Pld1	A0A0G2K5R0_RAT	0.1121
2014	Resistant anthrax lethal toxin	Nalp1	C0L7G5_RAT	0.1567
2015	Syntenin-1	Sdcbp	SDCB1_RAT	-0.3493
2016	Peroxisome proliferator-activated receptor gamma, coactivator-related 1	Pprc1	D3ZRG8_RAT	-0.3133
2017	[Protein ADP-ribosylarginine] hydrolase	Adprh	ADPRH_RAT	-1.0488
2018	Glutamic acid decarboxylase 1, isoform CRA_a	Gad1	C9E895_RAT	-0.1072
2019	Microtubule-associated protein	Map2	A0A0U1RRX4_RAT	0.0215
2020	RCG56468, isoform CRA_b	Snrpg	B5DEP7_RAT	0.2311
2021	Myelin-associated glycoprotein	Mag	MAG_RAT	-0.1526

2022	LOC64038 protein	Otulin	B0BMY6_RAT	0.1152
2023	DNA methyltransferase 1-associated protein 1	Dmap1	Q568Y6_RAT	-0.0892
2024	Inner centromere protein	Incenp	A0A0G2K0Q6_RAT	-0.0180
2025	Myosin XVIIIb	Myo18b	M0R6Z9_RAT	0.3808
2026	Synaptotagmin-6	Syt6	A0A0G2JW68_RAT	0.3650
2027	WD repeat domain 13	Wdr13	A0A0G2K0H6_RAT	0.2184
2028	Microtubule-associated protein 1S	Map1s	A0A0H2UHQ3_RAT	-0.0484
2029	Bis(5'-nucleosyl)-tetraphosphatase [asymmetrical]	Nudt2	AP4A_RAT	0.1048
2030	Family with sequence similarity 49, member A	Fam49a	B0BN65_RAT	0.0552
2031	SH3 domain-binding glutamic acid-rich-like protein	Sh3bgrl	B5DFD8_RAT	-0.0188
2032	Alpha-crystallin B chain	Cryab	CRYAB_RAT	0.2185
2033	COP9 (Constitutive photomorphogenic) homolog, subunit 6 (<i>Arabidopsis thaliana</i>) (Predicted), isoform CRA_a	Cops6	D3ZI16_RAT	0.4653
2034	Heterogeneous nuclear ribonucleoprotein L-like	Hnrnp1l	D4A3E1_RAT	0.2674
2035			D4ADS8_RAT	0.0823
2036	Uncharacterized protein	N/A	F1LTJ5_RAT	0.0041
2037	Fumarylacetoacetase	Fah	F1M6W1_RAT	0.0582
2038	Protein kinase C and casein kinase substrate in neurons 2 protein	Paccin2	PACN2_RAT	0.1492
2039	Tumor protein D54	Tpd52l2	TPD54_RAT	0.2916
2040	60S ribosomal protein L36	Rpl36	A0A140TAI6_RAT	0.3185
2041	ELAV-like protein 1	Elavl1	ELAV1_RAT	-0.1629

2042	Dynamin-2	Dnm2	A0A0A0MY48_RAT	-0.3454
2043	VPS53 GARP complex subunit	Vps53	B4F763_RAT	-0.0818
2044	BAG family molecular chaperone regulator 5	Bag5	BAG5_RAT	-0.4378
2045	Ring finger protein 214	Rnf214	D4A3V4_RAT	0.3246
2046	Protein phosphatase 1, regulatory subunit 21	Ppp1r21	F1LYZ8_RAT	-0.0326
2047	Exportin 7	Xpo7	A0A0G2JWA3_RAT	-0.2313
2048	Chloride channel protein	Clcn6	D4A3H5_RAT	0.1580
2049	Tyrosine-protein kinase Lyn	Lyn	LYN_RAT	-0.0504
2050	Chromosome segregation 1-like	Cse11	D3ZPR0_RAT	-0.5651
2051	Glutathione S-transferase, theta 3	Gstt3	D3Z8I7_RAT	-0.0282
2052	Magnesium-dependent phosphatase 1	Mdp1	D4A4U3_RAT	0.6226
2053	Ankyrin 2	Ank2	A0A0G2KBB9_RAT	-0.2962
2054	Hepatoma-derived growth factor-related protein 3	Hdgfl3	HDGR3_RAT	-0.4786
2055	Histone-binding protein RBBP7	Rbbp7	RBBP7_RAT	-0.3093
2056	Eukaryotic translation initiation factor 4, gamma 2	Eif4g2	F1LN59_RAT	-0.0230
2057	Enoyl-[acyl-carrier-protein] reductase, mitochondrial	Mecr	A0A140TAE6_RAT	-0.0022
2058	Asparagine synthetase [glutamine-hydrolyzing]	Asns	ASNS_RAT	0.4962
2059	Sodium/hydrogen exchanger 1	Slc9a1	SL9A1_RAT	0.0287
2060	Calsyntenin-3	Clstn3	CSTN3_RAT	0.1923
2061	Glutathione peroxidase 1	Gpx1	GPX1_RAT	0.1007
2062	Plexin B1	Plxnb1	D3ZDX5_RAT	-0.0030
2063	Atxn2 protein	Atxn2	B5DFB6_RAT	0.7311

2064	Similar to RIKEN cDNA 1110059P08	Vta1	A0A096MKH2_RAT	0.0536
2065	Galectin-1	Lgals1	LEG1_RAT	-0.2345
2066	Family with sequence similarity 120A	Fam120a	D4AB03_RAT	-0.5146
2067	Cul1 protein	Cul1	B1WBY1_RAT	-0.4693
2068	APC membrane recruitment protein 2	Amer2	A0A0G2JWK6_RAT	-0.4806
2069	Calcium-transporting ATPase	Atp2b2	D4A8B3_RAT	0.4146
2070	Ubiquitin-conjugating enzyme E2O	Ube2o	F1M403_RAT	0.0871
2071	Eukaryotic translation initiation factor 4E	Eif4e	IF4E_RAT	0.5535
2072	WD repeat domain 48	Wdr48	A0A0G2KAW5_RAT	0.1179
2073	VPS16 CORVET/HOPS core subunit	Vps16	Q642A9_RAT	-0.1436
2074	Adenylate cyclase	Adcy6	A0A0G2K429_RAT	-0.3493
2075	Clavesin-2	Clvs2	CLVS2_RAT	-0.0147
2076	Coronin-7	Coro7	CORO7_RAT	0.4340
2077	Laminin subunit alpha 4	Lama4	F1LTF8_RAT	0.1036
2078	Glycogen synthase kinase 3 beta, isoform CRA_b	Gsk3b	A0A0G2JSH4_RAT	-0.7146
2079	Eukaryotic translation initiation factor 3 subunit E	LOC100909481	A0A0G2K273_RAT	-0.0673
2080	Glypican-1	Gpc1	GPC1_RAT	-0.0022
2081	EFR3 homolog B	Efr3b	F1LTW9_RAT	-0.1348
2082	unkown		A0A096MIU7_RAT	-0.1205
2083	Ankyrin repeat and MYND domain-containing 2	Ankmy2	A0A0G2K8N6_RAT	-0.3943
2084	Methylmalonyl CoA mutase	Mut	D3ZKG1_RAT	-0.0820
2085	Inositol polyphosphate-1-phosphatase	Inpp1	Q5RJK6_RAT	0.3350
2086	FAS-associated factor 1	Faf1	F1LSQ0_RAT	-0.0242

2087	Ethanolamine-phosphate cytidyltransferase	Pcyt2	PCY2_RAT	-0.9987
2088	FXYP domain-containing ion transport regulator	Fxyd6	A0A0G2K1I7_RAT	-0.5093
2089	CDP-diacylglycerol--inositol 3-phosphatidyltransferase	Cdipt	CDIPT_RAT	-0.0953
2090	Microtubule-associated protein 1A	Map1a	MAP1A_RAT	0.3302
2091	Methylosome protein 50	Wdr77	MEP50_RAT	0.2438
2092	BCS1 homolog, ubiquinol-cytochrome c reductase complex chaperone	Bcs11	Q5XIM0_RAT	-0.4799
2093	Transmembrane emp24 domain-containing protein 7	Tmed7	TMED7_RAT	-0.2103
2094	Tubulin polymerization-promoting protein family member 3	Tppp3	TPPP3_RAT	0.1695
2095	Erythrocyte membrane protein band 4.1	Epb41	D3ZIP3_RAT	-0.2453
2096	MTSS1L, I-BAR domain-containing	Mtss1l	D4A3S6_RAT	0.2349
2097	Small ArfGAP2	Smapp2	A0A0G2K9N0_RAT	-0.0487
2098	COP9 signalosome complex subunit 2	Cops2	CSN2_RAT	0.1074
2099	ERO1-like protein alpha	Ero1a	ERO1A_RAT	-0.2241
2100	Cullin-5	Cul5	A0A0H2UHG3_RAT	0.1208
2101	Endoplasmic reticulum metalloproteinase 1	Ermp1	ERMP1_RAT	0.5233
2102	Gamma-aminobutyric acid receptor-associated protein-like 2	Gabarapl2	GBRL2_RAT	-0.4845
2103	Serine/threonine-protein kinase A-Raf	Araf	ARAF_RAT	0.5047
2104	Homer protein homolog 2	Homer2	HOME2_RAT	-0.3779
2105	GMP synthase [glutamine-hydrolyzing]	Gmps	A0A0G2K2C2_RAT	0.0702
2106	Thioredoxin domain-containing 17	Txndc17	B0K010_RAT	0.0892
2107	GTPase-activating protein and VPS9 domains	Gapvd1	D4A022_RAT	0.0979

	1			
2108	Prefoldin 5 (Predicted), isoform CRA_a	Pfdn5	B5DFN4_RAT	0.0906
	Translocase of inner mitochondrial membrane			
2109	29	Timm29	D3ZEG8_RAT	0.3704
2110	40S ribosomal protein S29	Rps29	RS29_RAT	-0.1044
	G protein-coupled receptor 37-like 1, isoform			
2111	CRA_a	Gpr37l1	B4F7C1_RAT	-0.2255
	Endoplasmic reticulum-golgi intermediate			
2112	compartment 1	Ergic1	F1LU48_RAT	-0.0157
2113	F-box only protein 3	Fbxo3	FBX3_RAT	0.1638
2114	Proteasome inhibitor PI31 subunit	Psmf1	F1M7S2_RAT	-0.3420
	Calcium/calmodulin-dependent protein kinase			
2115	kinase 1	Camkk1	F1LQD2_RAT	0.1593
2116	Shootin-1	Shtn1	D4A6P3_RAT	0.1926
2117	Guanylate kinase 1	Guk1	E9PTV0_RAT	-0.1724
2118	Calcium binding and coiled coil domain 1	Calcoco1	A0A0G2K0S1_RAT	-0.0233
2119	Acyl-coenzyme A thioesterase THEM4	Them4	THEM4_RAT	-0.0613
2120	RCG29001	Slc25a24	B1WC67_RAT	0.1475
2121	Pgm2 protein	Pgm2	F7FLB2_RAT	0.2912
2122	Glutamate--cysteine ligase catalytic subunit	Gclc	GSH1_RAT	-0.2770
2123	Leucine carboxyl methyltransferase 1	Lcmt1	G3V7V9_RAT	0.0739
	Huntingtin interacting protein 2 (Predicted),			
2124	isoform CRA_a	Ube2k	D3ZXS8_RAT	-0.1334
2125	Synaptotagmin-7	Syt7	SYT7_RAT	-0.0168
2126	Choline transporter-like protein 2	Slc44a2	CTL2_RAT	-0.0422
2127	Api5 protein	Api5	B1WC49_RAT	-0.1015
2128	Carnitine O-acetyltransferase	Crat	A0A0H2UI21_RAT	0.0754

2129	Multidrug resistance-associated protein 6	Abcc6	MRP6_RAT	-0.1118
2130	Plasmolipin	Plip	PLLP_RAT	-0.1747
2131	Thioredoxin-related transmembrane protein 2	Tmx2	TMX2_RAT	0.1881
2132	Hepatoma-derived growth factor	Hdgf	F1LPC7_RAT	0.0379
2133	DnaJ (Hsp40) homolog, subfamily B, member 1 (Predicted), isoform CRA_b	Dnajb1	B0K030_RAT	0.3580
2134	RB1-inducible coiled-coil 1	Rb1cc1	D3ZHK4_RAT	-0.0382
2135	Coiled-coil domain-containing 124	Ccdc124	D3ZUL1_RAT	-0.3705
2136	RCG53609	Uba2	B1WC32_RAT	0.0607
2137	Trifunctional purine biosynthetic protein adenosine-3	Gart	G3V918_RAT	1.0683
2138	Raftlin family member 2	Rftn2	D3ZII1_RAT	-0.0589
2139	Tetratricopeptide repeat domain 1	Ttc1	Q66H09_RAT	0.4384
2140	Protein pelota homolog	Pelo	PELO_RAT	-0.2848
2141	Tropomodulin-1	Tmod1	Q6IMZ5_RAT	-0.0413
2142	Catechol O-methyltransferase	Comt	COMT_RAT	-0.5210
2143	Receptor-type tyrosine-protein phosphatase-like N	Ptpn	PTPRN_RAT	0.2161
2144	Diacylglycerol kinase	Dgkq	D3ZEY4_RAT	0.3803
2145	Iron-sulfur cluster assembly enzyme	Iscu	B2RZ79_RAT	-0.0240
2146	Very-long-chain 3-oxoacyl-CoA reductase	Hsd17b12	D3ZPU3_RAT	0.0793
2147	Eukaryotic translation initiation factor 3 subunit G	Eif3g	EIF3G_RAT	0.3774
2148	Tyrosine-protein kinase receptor	Insr	F1LPL6_RAT	-0.4275
2149	Splicing factor 3b, subunit 2	Sf3b2	D3ZMS1_RAT	-0.3235
2150	Ac1288	N/A	Q7TQ77_RAT	-0.0061

2151	Tetratricopeptide repeat domain 7B	Ttc7b	A0A0G2JXJ6_RAT	-0.8973
2152	Solute carrier family 9 (Sodium/hydrogen exchanger), member 7 (Predicted)	Slc9a7	D3ZCI2_RAT	0.0570
2153	Transmembrane emp24 domain-containing protein 2	Tmed2	TMED2_RAT	-0.1514
2154	Thioredoxin reductase 1, cytoplasmic	Txnrd1	A0A0G2JUN7_RAT	-0.1399
2155	p55 protein	LOC652956	Q5BK33_RAT	0.3979
2156	Formin-like 2	Fmnl2	A0A0G2K132_RAT	0.2600
2157	Leucine-rich repeat-containing 40	Lrrc40	G3V7I7_RAT	-0.6957
2158	TSC22 domain family protein 1	Tsc22d1	D3Z8M8_RAT	0.1665
2159	Transmembrane protein 11, mitochondrial	Tmem11	A0A0G2JUS7_RAT	0.0592
2160	Succinate dehydrogenase [ubiquinone] cytochrome b small subunit, mitochondrial	Sdhb	DHSD_RAT	0.0872
2161	Cytohesin-3	Cyth3	F1LQP0_RAT	-0.2814
2162	39S ribosomal protein L9, mitochondrial	Mrpl9	RM09_RAT	-0.4155
2163	Aflatoxin B1 aldehyde reductase member 2	Akr7a2	A0A0A0MXY9_RAT	0.1752
2164	Sodium channel beta 2 subunit	SCNB2	Q62861_RAT	0.3801
2165	Acyl-Coenzyme A binding domain containing 3	Acbd3	Q5XI18_RAT	-0.1951
2166	Serine/threonine-protein phosphatase	Ppp3cc	E2CWF0_RAT	-0.4416
2167	Cyclin-dependent kinase 18	Cdk18	A0A0H2UHG4_RAT	-0.2347
2168	Hypothetical protein LOC500956	LOC500956	A0A140TAE2_RAT	0.5974
2169	Proto-oncogene tyrosine-protein kinase Src	Src	SRC_RAT	-0.1921
2170	Ena/VASP-like protein	Evl	A0A0G2K217_RAT	0.0517
2171	ArfGAP with FG repeats 2	Agfg2	A0A0G2K7G2_RAT	0.0533
2172	Serine/threonine-protein kinase DCLK1	Dclk1	DCLK1_RAT	0.0054

2173	Multidrug resistance protein 1a	Mdr1a	Q6PSM0_RAT	0.1531
2174	PDZ and LIM domain protein 5	Pdlim5	PDLI5_RAT	0.1886
2175	Tetratricopeptide repeat protein 19, mitochondrial	Ttc19	TTC19_RAT	0.3644
2176	Exocyst complex component 6	Exoc6	EXOC6_RAT	0.2212
2177	SEC24 homolog B, COPII coat complex component	Sec24b	D3ZW15_RAT	-0.6648
2178	Synapse associated protein 1, isoform CRA_a	Syap1	F7F350_RAT	0.6908
2179	Hexokinase-2	Hk2	HXK2_RAT	0.4434
2180	Adenylate kinase 2, mitochondrial	Ak2	A0A0G2JSG6_RAT	-0.0993
2181	3-oxoacyl-[acyl-carrier-protein] synthase, mitochondrial	Oxsm	G3V6R7_RAT	-0.1967
2182	Protein prune homolog 2	Prune2	PRUN2_RAT	0.4197
2183	Eph receptor B3	Ephb3	D3ZH39_RAT	0.7278
2184	WD repeat and FYVE domain-containing 1	Wdfy1	A0A0G2K3L8_RAT	0.1087
2185	Protein tyrosine kinase 7	Ptk7	D3ZHG3_RAT	-0.1719
2186	Neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adaptor 2	Nyap2	F1M3A4_RAT	0.8885
2187	Fructosamine-3-kinase-related protein	Fn3krp	B2RYN1_RAT	-0.1266
2188	Unkempt family zinc finger	Unk	D3ZV40_RAT	-0.6526
2189	Histone cluster 1 H1 family member d	Hist1h1d	M0R7B4_RAT	-0.0413
2190	Transmembrane protein 160	Tmem160	D3ZZU4_RAT	-0.2662
2191	N-acetylneuraminate synthase	Nans	B1WC26_RAT	-0.2368
2192	RCG19966	Tspyl4	Q66H46_RAT	0.2050
2193	Murinoglobulin-1	Mug1	D4A6E3_RAT	-0.0382
2194	Acyl-CoA dehydrogenase family, member 8	Acad8	M0RDK9_RAT	-0.3838

2195	Leukotriene A(4) hydrolase	Lta4h	Q499P2_RAT	-0.1514
2196	Ubiquitin recognition factor in ER-associated degradation protein 1	Ufd1	UFD1_RAT	0.2420
2197	Signal transducer and activator of transcription	N/A	Q7TP57_RAT	0.4459
2198	AH receptor-interacting protein	Aip	AIP_RAT	0.1624
2199	Ubiquitin-like-conjugating enzyme ATG3	Atg3	ATG3_RAT	0.4781
2200	60S ribosomal protein L35	Rpl35	RL35_RAT	-0.0455
2201	Dynactin 5	Dctn5	Q4KM59_RAT	0.4538
2202	Chondroitin sulfate proteoglycan 4	Cspg4	CSPG4_RAT	0.2163
2203	RCG56631, isoform CRA_d	Sltn	A0A0G2K904_RAT	-0.2272
2204	Transcription factor A	Tfa	Q9ES32_RAT	0.2997
2205	Protein argonaute-2	Ago2	AGO2_RAT	0.0599
2206	Tubulin alpha chain	Tubal3	F1LUM5_RAT	-0.1784
2207	Helicase with zinc finger	Helz	D4ADZ6_RAT	-0.4023
2208	Uncharacterized protein	N/A	M0R4P6_RAT	-0.5402
2209	RAN-binding protein 9	Ranbp9	F1LVV3_RAT	-0.5243
2210	Uncharacterized protein	N/A	F1M024_RAT	-0.3790
2211	ADP-ribosylation factor 6	Arf6	ARF6_RAT	0.0697
2212	Protein transport protein sec16	Sec16a	D3ZN76_RAT	-0.1003
2213	Cytochrome P450 3A18	Cyp3a18	CP3AI_RAT	-0.6991
2214	Mitochondrial dicarboxylate carrier	Slc25a10	O89035_RAT	0.0530
2215	RNA binding protein fox-1 homolog	Rbfox3	A0A0G2K2J4_RAT	-0.3727
2216	Spermine synthase	Sms	Q3MIE9_RAT	-0.1485
2217	Myotubularin-related protein 7	Mtmr7	A0A0G2K1P1_RAT	0.0309

2218	Serine and arginine-rich-splicing factor 11	Srsf11	A0A0G2QC38_RAT	0.3958
2219	Centriole, cilia and spindle-associated protein	Ccsap	D3ZZM9_RAT	0.1421
2220	Calmodulin-regulated spectrin-associated protein 2	Camsap2	A0A0G2K7K9_RAT	-0.1503
2221	Obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF	Obscn	A0A0G2K8N1_RAT	0.0034
2222	Solute carrier family 24 member 4	Slc24a4	A0A0G2K3S9_RAT	0.3016
2223	Histone H3	H3f3b	B0BMY8_RAT	-0.1351
2224	DDHD domain-containing 1	Ddhd1	Q3ZAU5_RAT	0.0196
2225	Core histone macro-H2A	H2afy2	B1WC28_RAT	0.1105
2226	Tetraspanin	Tspan7	B0BNE7_RAT	-0.2498
2227	Prothymosin alpha	Ptma	PTMA_RAT	0.2608
2228	Serine/threonine-protein phosphatase	LOC100362 453	A0A0G2JYA4_RAT	-0.1601
2229	NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 2 (Predicted), isoform CRA_b	Ndufb2	B2RYU0_RAT	0.0435
2230	RCG43475	Tomm6	D3ZJS3_RAT	0.3141
2231	Neurotrimin	Ntm	G3V964_RAT	0.0923
2232	Sideroflexin	Sfxn1	Q6AYS2_RAT	-0.6050
2233	SPARC	Sparc	SPRC_RAT	0.2775
2234	Transformer-2 protein homolog beta	Tra2b	TRA2B_RAT	-0.0099
2235	Annexin	Anxa13	D3ZHD1_RAT	-0.2612
2236	Charged multivesicular body protein 2A	Chmp2a	B2RZB5_RAT	-0.0228
2237	Histone-lysine N-methyltransferase, H3 lysine-79 specific	Dot1l	D3ZCP0_RAT	0.0915
2238	Dynein, axonemal, heavy chain 8	Dnah8	F1MAM6_RAT	-0.1378
2239	Zinc finger ZZ-type and EF-hand	Zzef1	D3ZG78_RAT	-0.5820

	domain-containing 1			
2240	Distal membrane-arm assembly complex protein 2	Dmac2	AT5SL_RAT	0.0748
2241	Rap guanine nucleotide exchange factor (GEF) 6 (Predicted), isoform CRA_a	Rapgef6	D3ZTL8_RAT	0.1939
2242	Leucine-rich repeat transmembrane neuronal protein 1	Lrrtm1	LRRT1_RAT	-0.2949
2243	Angiotensinogen	Agt	ANGT_RAT	-0.0439
2244	Paralemmin 3	Palm3	D4A1J3_RAT	0.5754
2245	Sulfite oxidase	Suox	G3V6R5_RAT	0.1084
2246	Tumor protein D52-like 1	Tpd52l1	A0A0G2K8M7_RAT	0.1843
2247	Ubiquitin carboxyl-terminal hydrolase	Uchl5	Q5HZY3_RAT	0.1686
2248	1-acyl-sn-glycerol-3-phosphate acyltransferase delta	Agpat4	A0A0G2JWH4_RAT	0.0720
2249	ADP-ribosylation factor-like protein 3	Arl3	ARL3_RAT	0.1540
2250	Eukaryotic translation initiation factor 2 subunit 3, X-linked	Eif2s3	IF2G_RAT	-0.3983
2251	Nucleosome assembly protein 1-like 1	Nap1l1	G3V6H9_RAT	0.4875
2252	Histone deacetylase	Hdac6	A0A0G2QC41_RAT	0.1650
2253	RAB2B, member RAS oncogene family	Rab2b	Q3B7V5_RAT	-0.3183
2254	Syntaxin binding protein 3, isoform CRA_a	Stxbp3	Q99PV2_RAT	0.0693
2255	Serine/threonine kinase 11 (Predicted), isoform CRA_a	Stk11	A0A0H2UI02_RAT	0.9233
2256	Carboxypeptidase D	Cpd	CBPD_RAT	0.1791
2257	Calcium-binding mitochondrial carrier protein SCaMC-2	Slc25a25	SCMC2_RAT	0.2420
2258	ATP-dependent zinc metalloprotease YME1L1	LOC108348078	G3V886_RAT	-0.0728

2259	DNA-(apurinic or apyrimidinic site) lyase	Apex1	APEX1_RAT	0.0781
2260	Proteasome activator complex subunit 1	Psme1	PSME1_RAT	-0.4877
2261	UPF0687 protein C20orf27 homolog	N/A	CT027_RAT	0.0205
2262	Tetraspanin-2	Tspan2	TSN2_RAT	-0.1452
2263	Cytochrome c oxidase subunit 6A1, mitochondrial	Cox6a1	CX6A1_RAT	0.0334
2264	Heat shock-related 70 kDa protein 2	Hspa2	HSP72_RAT	0.1788
2265	Tuberin	Tsc2	A0A0G2JSL4_RAT	0.3708
2266	ADP-ribosylation factor-like protein 8B	Arl8b	ARL8B_RAT	0.2343
2267	D-2-hydroxyglutarate dehydrogenase, mitochondrial	D2hgdh	A0A0A0MXZ3_RAT	-0.0830
2268	Cytochrome c oxidase assembly factor 6 homolog	Coa6	A0A0G2JUM8_RAT	-0.1745
2269	Peroxisomal biogenesis factor 19	Pex19	A0A0G2JY69_RAT	0.1530
2270	Nuclear ubiquitous casein and cyclin-dependent kinase substrate 1	Nucks1	A0A0G2K7X3_RAT	0.2649
2271	CD99 molecule (Xg blood group)	Cd99	B4F7A5_RAT	-0.2012
2272	Calcineurin B homologous protein 1	Chp1	CHP1_RAT	-0.1062
2273	Similar to D3Mm3e (Predicted), isoform CRA_a	Wdr54	D3ZX63_RAT	0.3043
2274	Nudix hydrolase 11	Nudt10	D3ZYH3_RAT	-0.3409
2275	Histone-lysine N-methyltransferase SETD7	Setd7	D4ADE5_RAT	-0.3964
2276	GMP reductase	Gmpr	F1LRV6_RAT	-0.1630
2277	Plakophilin 4	Pkp4	F1M2K6_RAT	0.0933
2278	Nucleolar protein 3	Nol3	G3V7Z3_RAT	-0.0307
2279	Cysteine conjugate-beta lyase 1, isoform CRA_a	Kyat1	G3V827_RAT	0.1049

2280	Centrin 2	Cetn2	G3V9W0_RAT	-0.0497
2281	Monocarboxylate transporter 1	Slc16a1	MOT1_RAT	0.0374
2282	Transmembrane 9 superfamily member 2	Tm9sf2	TM9S2_RAT	0.0418
2283	60S ribosomal protein L37a	Rpl37a	A0A0H2UHU1_RAT	-0.1907
2284	Ras-related protein Rab-31	Rab31	A0A0G2JSZ1_RAT	-0.5632
2285	Amyloid-beta A4 protein	App	A4_RAT	0.4073
2286	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial	Ndufv3	NDUV3_RAT	-0.1560
2287	Ras-related protein Rab-12	Rab12	D4A376_RAT	0.0853
2288	Ubiquitin carboxyl-terminal hydrolase	Uchl3	D4ABI6_RAT	-0.1138
2289	S100 calcium binding protein A16 (Predicted), isoform CRA_a	S100a16	B0BMX3_RAT	0.7720
2290	Protein NDRG4	Ndrg4	D3Z831_RAT	-0.1106
2291	Trafficking protein particle complex subunit 9	Trappc9	D3ZJK6_RAT	0.0861
2292	NAD kinase 2, mitochondrial	Nadk2	A0A096MKG5_RAT	-0.0891
2293	Divalent cation tolerant protein CUTA, isoform CRA_c	Cuta	A0A0G2JT00_RAT	-0.1834
2294	Developmentally-regulated GTP-binding protein 1	Drg1	Q5I0F0_RAT	-0.3880
2295	Zinc finger RNA-binding protein	Zfr	A0A0H2UHI5_RAT	0.3041
2296	Enolase-phosphatase E1	Enoph1	ENOPH_RAT	0.1280
2297	Phosphatidylinositol 5-phosphate 4-kinase type-2 gamma	Pip4k2c	G3V9W5_RAT	0.0386
2298	Histone H2B	Hist3h2bb	M0RBQ5_RAT	0.0973
2299	Protein SEC13 homolog	Sec13	SEC13_RAT	0.2092
2300	Seryl-tRNA synthetase 2 (Predicted)	Sars2	D3ZM09_RAT	0.1093
2301	Potassium/sodium hyperpolarization-activated	Hcn1	F1LSH6_RAT	-0.1438

	cyclic nucleotide-gated channel 1			
2302	Copine 5	Cpne5	D3ZGN2_RAT	-0.0070
2303	SHC-transforming protein 3	Shc3	G3V7V0_RAT	-0.2822
2304	Poly(U)-binding-splicing factor PUF60	Puf60	A0A0H2UHZ6_RAT	-0.2216
2305	Myotubularin related protein 2 (Predicted), isoform CRA_b	Mtmr2	D3ZA31_RAT	0.0593
2306	Tyrosine-protein phosphatase non-receptor type 5	Ptpn5	A0A0G2QC31_RAT	-0.4187
2307	GDNF family receptor alpha	Gfra2	O35977_RAT	-0.1456
2308	Small nuclear ribonucleoprotein D1	Snrpd1	B2RZB7_RAT	0.2408
2309	CPG2 protein	cpg2	Q63128_RAT	-0.6435
2310	RCG39552, isoform CRA_a	Spon1	Q3B7D6_RAT	0.7874
2311	G protein-coupled receptor 162	Gpr162	D4AAS1_RAT	0.1637
2312	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit	Ppp2r5c	D4A1A5_RAT	0.0855
2313	Itfg1 protein	Itfg1	Q5U355_RAT	-0.1250
2314	Transgelin	Tagln	A0A0G2JWK7_RAT	-0.1893
2315	Hippocalcin-like protein 1	Hpcal1	HPCL1_RAT	0.1827
2316	Adenylosuccinate synthetase isozyme 2	Adss	D4AEP0_RAT	-0.2524
2317	Ectonucleoside triphosphate diphosphohydrolase 2	Entpd2	ENTP2_RAT	0.1175
2318	Glucose-fructose oxidoreductase domain-containing 1	Gfod1	D3ZR63_RAT	-0.1191
2319	Interactor protein for cytohesin exchange factors 1	Ipcef1	ICEF1_RAT	0.2666
2320	F-box only protein 6	Fbxo6	FBX6_RAT	-0.8716
2321	Carbamoyl-phosphate synthase [ammonia],	Cps1	CPSM_RAT	-0.5554

	mitochondrial			
2322	Keratin, type I cytoskeletal 18	Krt18	K1C18_RAT	0.2282
2323	Capping protein regulator and myosin 1 linker 2	Carmil2	D3ZC15_RAT	0.1861
2324	Sec1 family domain-containing protein 1	Scfd1	SCFD1_RAT	-0.3739
2325	Guanine nucleotide-binding protein subunit gamma	Gng7	A0A0G2JSR6_RAT	-0.0777
2326	Teneurin transmembrane protein 3	Tenm3	F1LV44_RAT	-0.0760
2327	Transportin 1	Tnpol	F1LQP9_RAT	0.3354
2328	Neurologin-3	Nlgn3	D3ZDC0_RAT	0.0182
2329	ERH, mRNA-splicing and mitosis factor	Erh	A0A0G2KAN5_RAT	0.2441
2330	Pyridoxal phosphate homeostasis protein	Plpbp	D3ZCA0_RAT	0.0924
2331	Acylpyruvase FAHD1, mitochondrial	Fahd1	FAHD1_RAT	-0.2483
2332	Nuclear transport factor 2	Nutf2	NTF2_RAT	0.0828
2333	RING finger protein 141	Rnf141	RN141_RAT	0.5207
2334	TIP41-like protein	Tiprl	TIPRL_RAT	-0.0733
2335	Canopy 2 homolog (Zebrafish)	Cnpy2	A0JN30_RAT	0.5636
2336	Fibrinogen beta chain	Fgb	FIBB_RAT	-0.0548
2337	Similar to RIKEN cDNA 1110063G11 (Predicted)	Tmcc2	D3ZE26_RAT	-0.3593
2338	SYNRG_RAT	Synrg	SYNRG_RAT	-0.2516
2339	DNA topoisomerase 1	Top1	A0A0G2K3V7_RAT	-0.1351
2340	Transcription factor 25	Tcf25	D3ZC46_RAT	0.2481
2341	Cystatin-B	Cstb	CYTB_RAT	-0.0685
2342	NADH:ubiquinone oxidoreductase subunit A3	Ndufa3	A0A0G2KAA3_RAT	-0.1214
2343	Prosaposin	Psap	F7EPE0_RAT	0.0303

2344	ADP-ribosylhydrolase like 2 (Predicted)	Adprh12	B0K017_RAT	0.1003
2345	Myotubularin-related protein 12	Mtmr12	MTMRC_RAT	0.0110
2346	Misato 1, mitochondrial distribution and morphology regulator	Msto1	D3ZMW3_RAT	-0.1259
2347	Serine/threonine-protein kinase TAO2	Taok2	A0A0G2JXV6_RAT	0.2068
2348	GMP reductase	Gmpr2	A0A0G2JX25_RAT	0.2167
2349	Branched chain keto acid dehydrogenase E1, beta polypeptide	Bckdhb	B0BNK6_RAT	0.1605
2350	LSM8 homolog, U6 small nuclear RNA associated (<i>S. cerevisiae</i>)	Lsm8	B2RZB6_RAT	-0.0350
2351	Mitochondrial-processing peptidase subunit beta	Pmpcb	MPPB_RAT	0.0258
2352	Voltage-dependent calcium channel gamma-2 subunit	Caeng2	CCG2_RAT	-0.1239
2353	UBX domain-containing protein 4	Ubxn4	UBXN4_RAT	0.2097
2354	Neural Wiskott-Aldrich syndrome protein	Wasl	F1LSG0_RAT	-0.4446
2355	Pleiotropic regulator 1	Plrg1	PLRG1_RAT	-0.0091
2356	Tau tubulin kinase 1	Ttbk1	A0A0G2JTK1_RAT	0.2601
2357	Non-specific serine/threonine protein kinase	Akt3	A0A0G2JXD7_RAT	-0.1315
2358	SRSF protein kinase 2	Srpk2	A0A0G2JX62_RAT	0.4291
2359	TBC1 domain family, member 17	Tbc1d17	B1H264_RAT	0.3604
2360	Caveolin	Cav1	A2VCW2_RAT	0.0122
2361	Sorting nexin 12	Snx12	A0A096MKE2_RAT	0.3140
2362	Nuclear pore membrane glycoprotein 210	Nup210	PO210_RAT	-0.1472
2363	SH3 domain-binding glutamic acid-rich-like protein 2	Sh3bgrl2	D4ADA8_RAT	-0.1631
2364	Threonine--tRNA ligase, mitochondrial	Tars2	SYTM_RAT	-0.2336

2365	Long-chain-fatty-acid--CoA ligase 5	Acs15	ACSL5_RAT	-0.3587
2366	Selenoprotein F	Selenof	A0A0G2KAY8_RAT	0.0787
2367	Basic leucine zipper and W2 domain-containing protein 2	Bzw2	BZW2_RAT	0.3420
2368	Serum paraoxonase/arylesterase 2	Pon2	PON2_RAT	-0.3544
2369	Abhydrolase domain containing 3 (Predicted)	Abhd3	D4A3D4_RAT	0.4147
2370	WD repeat-containing protein 26	Wdr26	F1LTR1_RAT	0.2289
2371	Protein FAM136A	Fam136a	F136A_RAT	0.1744
2372	Aspartoacylase	Aspa	A0A0H2UHY8_RAT	0.0059
2373	Proton myo-inositol cotransporter	Slc2a13	MYCT_RAT	0.1194
2374	Cnpy3 protein	Cnpy3	B2RYF8_RAT	-0.5441
2375	Actin-related protein 2/3 complex subunit 5-like protein	Arpc51	ARP5L_RAT	0.0152
2376	Gasdermin-E Gasdermin-E, N-terminal Gasdermin-E, C-terminal	Gsdme	A0A0G2K6Y3_RAT	-0.2502
2377	Short chain dehydrogenase/reductase family 39U, member 1	Sdr39u1	D3ZYY0_RAT	0.1315
2378	Ubiquitin-conjugating enzyme E2 Z	Ube2z	UBE2Z_RAT	-0.7029
2379	Similar to 60S ribosomal protein L27a	RGD1562402	A0A0G2K7W6_RAT	-0.2168
2380	Protocadherin 10	Pcdh10	D3ZRX7_RAT	0.1783
2381	Breast carcinoma-amplified sequence 1 homolog	Bcas1	A0A0G2K079_RAT	-0.0446
2382	Dystroglycan 1	Dag1	F1M8K0_RAT	-1.0014
2383	Cation-transporting ATPase	Atp13a1	B5DEX7_RAT	-0.0963
2384	Vps11 protein	Vps11	B5DF01_RAT	0.2465
2385	Cullin 4A	Cul4a	B2RYJ3_RAT	-0.4015

2386	Protocadherin 7, isoform CRA_b	Pcdh7	Q68HB5_RAT	-0.3435
2387	Cartilage acidic protein 1	Crtac1	A0A096MJM0_RAT	0.3755
		RGD15616		
2388	Similar to RIKEN cDNA 2900010M23	71	D3Z949_RAT	-0.1359
2389	CREB-regulated transcription coactivator 1	Crtc1	CRTC1_RAT	-0.2028
2390	Casein kinase 1, epsilon	Csnk1e	Q99PS2_RAT	-0.4233
2391	E3 ubiquitin-protein ligase RNF123	Rnf123	F1LMI7_RAT	0.4132
2392	GDP-mannose 4, 6-dehydratase	Gmds	Q3MHS7_RAT	0.0289
2393	Diacylglycerol kinase	Dgki	Q810C5_RAT	-0.2406
	Platelet-activating factor acetylhydrolase IB			
2394	subunit beta	Pafah1b2	PA1B2_RAT	-0.1573
2395	Lipocalin 7, isoform CRA_a	Tinagl1	Q4V8N0_RAT	0.0594
2396	Transgelin-2	Tagln2	TAGL2_RAT	0.0054
2397	Peptidyl-prolyl cis-trans isomerase FKBP4	Fkbp4	FKBP4_RAT	0.2167
2398	Peroxisomal trans-2-enoyl-CoA reductase	Pecr	A0A0G2JUF1_RAT	0.1236
2399	Uncharacterized protein	N/A	M0R970_RAT	-0.5748
2400	Beta-hexosaminidase	Hexb	F1LR87_RAT	-0.1272
2401	NIPA-like domain-containing 3	Nipal3	D3ZZI0_RAT	-0.0590
2402	Muscle RAS oncogene homolog	Mras	Q5RKJ7_RAT	-0.0216
2403	Glutamate receptor-interacting protein 1	Grip1	F1LMX8_RAT	-0.3403
2404	ATP-binding cassette subfamily F member 2	Abcf2	A0A096MIV5_RAT	-0.5286
	FAD-dependent oxidoreductase			
2405	domain-containing protein 1	Foxred1	D3ZEH2_RAT	0.3529
2406	DIS3-like exonuclease 2	Dis3l2	A0A0G2K6W6_RAT	-0.1259
2407	Plasminogen receptor (KT)	Plgrkt	PLRKT_RAT	0.1512
2408	Collagen alpha-1(II) chain	Col2a1	CO2A1_RAT	-0.0262

2409	BCL2-associated transcription factor 1, isoform CRA_a	Bclaf1	B1WC16_RAT	-2.2725
2410	Guanine nucleotide-binding protein subunit gamma	Gng10	Q3KRE3_RAT	0.3315
2411	Coiled-coil domain-containing protein 51	Ccdc51	A0A0G2JXH2_RAT	0.2825
2412	Arf-GAP domain and FG repeat-containing protein 1	Agfg1	AGFG1_RAT	-0.6218
2413	Long-chain-fatty-acid--CoA ligase 1	Acs11	ACSL1_RAT	0.7998
2414	Kelch-like protein 22	Klhl22	A0A0G2KA06_RAT	-0.4382
2415	Patatin-like phospholipase domain-containing 6	Pnp1a6	D3ZRF6_RAT	-0.0356
2416	Band 3 anion transport protein	Slc4a1	B3AT_RAT	-0.0637
2417	Cold shock domain-containing protein E1	Csde1	CSDE1_RAT	0.1686
2418	Rabenosyn, RAB effector	Rbsn	D3ZL11_RAT	-1.2648
2419	Alpha II spectrin	N/A	C9EH87_RAT	0.1276
2420	Cytoplasmic polyadenylation element-binding protein 3	Cpeb3	D4AD99_RAT	-0.6210
2421	Phosphoinositide kinase, FYVE-type zinc finger-containing	Pikfyve	D3ZYT8_RAT	0.2144
2422	FAST kinase domain-containing protein 4	Tbrg4	TBRG4_RAT	0.2309
2423	Kirre-like nephrin family adhesion molecule 3	Kirrel3	A0A0G2K5L4_RAT	0.4900
2424	ESF1 homolog	Esf1	ESF1_RAT	-0.0140
2425	Glycogen phosphorylase, brain form	Pygb	PYGB_RAT	-0.1423
2426	Nucleolar protein 58	Nop58	NOP58_RAT	0.1558
2427	Tensin 1	Tns1	F1LN42_RAT	-0.0745
2428	Embigin	Emb	A0A0G2JU92_RAT	0.6823
2429	Amyloid-like protein 2	Aplp2	APLP2_RAT	-0.3685

2430	Anion exchange protein 3	Slc4a3	B3A3_RAT	-0.0060
2431	RCG30218, isoform CRA_b	Tigar	Q566D2_RAT	0.2630
2432	B-cell receptor-associated protein 29	Bcap29	Q5XIU4_RAT	-0.0706
2433	CD99 antigen-like protein 2	Cd99l2	C99L2_RAT	-0.4071
2434	STT3A, catalytic subunit of the oligosaccharyltransferase complex	Stt3a	B4F7C9_RAT	0.4346
2435	DM1 locus, WD repeat-containing	Dmwd	F1M3D2_RAT	-0.0697
2436	Guanylate cyclase soluble subunit alpha-2	Gucy1a2	GCYA2_RAT	-0.1753
2437	RAB30, member RAS oncogene family	Rab30	A0A0G2JTT4_RAT	0.1830
2438	Nipsnap homolog 3A (C. elegans)	Nipsnap3b	Q5M949_RAT	-0.0223
2439	Large neutral amino acids transporter small subunit 1	Slc7a5	LAT1_RAT	-0.1214
2440	F-box only protein 7	Fbxo7	A0A0G2JXK7_RAT	-0.0382
2441	Leiomodin-1	Lmod1	A0A0G2K0D3_RAT	-0.0702
2442	Attractin	Atrn	ATRN_RAT	-0.4660
2443	Glucosylceramidase	Gba	B2RYC9_RAT	-0.2971
2444	Transmembrane emp24 domain-containing protein 9	Tmed9	TMED9_RAT	-0.3486
2445	AP2-interacting clathrin-endocytosis protein	Kiaa1107	D4A0X3_RAT	-0.6003
2446	Pumilio RNA-binding family member 1	Pum1	D3Z8L5_RAT	-0.0911
2447	ATP-binding cassette sub-family C member 8	Abcc8	ABCC8_RAT	-0.1503
2448	Density-regulated protein	Denr	B0BNB2_RAT	0.0528
2449	Alpha-adducin	Add1	D3ZZ99_RAT	-0.4671
2450	Glycerophosphodiester phosphodiesterase 1	Gde1	GDE1_RAT	-0.4110
2451	Phosphoglycerate mutase	Bpgm	Q6P6G4_RAT	0.0350
2452	RCG56371	Spr	B2RYK3_RAT	0.6210

2453	Paraplegin	Spg7	A0A0G2K536_RAT	-0.7018
2454	Nucleoside-triphosphatase, cancer-related	Ntpcr	D4A478_RAT	1.0812
2455	Golgi-associated, gamma adaptin ear-containing, ARF-binding protein 3	Gga3	A0A0G2JV04_RAT	-0.1164
2456	[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 1, mitochondrial	Pdk1	F1MA54_RAT	0.7369
2457	LRRGT00101	Tmem106b	Q6TUE3_RAT	0.2119
2458	Phosphatidylinositol 4,5-bisphosphate 5-phosphatase A	Inpp5j	PI5PA_RAT	-0.8791
2459	Casein kinase I isoform gamma-1	Csnk1g1	A0A0G2K7C4_RAT	0.6298
2460	Arylsulfatase A	Arsa	Q32KK2_RAT	0.0440
2461	Zinc finger RNA-binding protein 2	Zfr2	D4A148_RAT	-0.3675
2462	HN1	Jpt1	A0A059NZR0_RAT	-0.4157
2463	Alpha-actinin-4	Actn4	A0A0G2K5U9_RAT	0.0895
2464	FXYD domain-containing ion transport regulator	Fxyd1	A0A0H2UHS8_RAT	-0.4614
2465	Clathrin coat assembly protein AP180	Snap91	AP180_RAT	0.3470
2466	Family with sequence similarity 241 member B	Fam241b	B0BMZ1_RAT	0.1038
2467	Cytochrome C oxidase assembly factor 3	Coa3	D3Z9I1_RAT	-0.2025
2468	Selenophosphate synthetase 1	Sephs1	D3ZFY0_RAT	0.5463
2469	COMM domain-containing 6	Commd6	D4A8E7_RAT	0.5929
2470	Claudin 12	Cldn12	D4A8Y0_RAT	-0.0548
2471	ER membrane protein complex subunit 1	Emc1	D4A994_RAT	-0.0842
2472	ER membrane protein complex subunit 8	Emc8	EMC8_RAT	0.2651
2473	Alpha-internexin	Ina	G3V8Q2_RAT	-0.3733

2474	RCG47487, isoform CRA_b	Tmem132a	G3V963_RAT	-0.0896
2475	40S ribosomal protein S30	LOC100360 647	Q5BJN7_RAT	-0.2495
2476	ELAV-like protein	Elavl3	Q76IJ9_RAT	-0.1832
2477	Transcription factor BTF3	N/A	A0A0G2K4W2_RAT	0.1094
2478	Transient receptor potential cation channel subfamily M member 7	Trpm7	A0A0G2JYN5_RAT	0.0943
2479	Poly(rC)-binding protein 4	Pcbp4	D3ZCS3_RAT	0.1702
2480	Transcriptional adapter 1	Tada1	A0A0H2UHC2_RAT	0.1723
2481	PMS1 homolog 1, mismatch repair system component	Pms1	D4A651_RAT	-0.3151
2482	Intraflagellar transport 74	Ift74	Q5XIR2_RAT	0.6527
2483	GRIP and coiled-coil domain-containing protein 2	Gcc2	A0A0H2UH94_RAT	0.5890
2484	Hedgehog protein	Shh	G3V6T0_RAT	-0.0683
2485	Exocyst complex component 7	Exoc7	EXOC7_RAT	-0.0479
2486	F-box and leucine-rich repeat protein 11 (Predicted)	Kdm2a	D3ZTJ7_RAT	-0.0943
2487	Tumor protein p53-binding protein 1	Tp53bp1	F1M842_RAT	0.3591
2488	Sidekick cell adhesion molecule 2	Sdk2	A0A0G2K999_RAT	0.1917
2489	Centrosomal protein of 83 kDa	Cep83	CEP83_RAT	-0.2270
2490	Membrane-associated ring finger (C3HC4) 5	5-Mar	B0BNF6_RAT	-0.4246
2491	Small nuclear ribonucleoprotein polypeptide A	Snrpa	Q5U214_RAT	0.0463
2492	Complement C4-like	LOC103689 965	A0A0G2JW12_RAT	-0.2357
2493	PDZ domain containing 8 (Predicted)	Pdzd8	D3ZXY2_RAT	0.0013

2494	Mtr4 exosome RNA helicase	Mtrex	D4AE49_RAT	0.4790
2495	Angiomotin-like protein 1	Amotl1	F1LZQ6_RAT	0.2602
2496	Acylphosphatase	Acyp1	D4A6X4_RAT	0.5917
2497	Non-SMC condensin I complex, subunit G	Ncapg	D3ZD72_RAT	-0.3948
2498	Cell division cycle 16	Cdc16	A0A0G2JT88_RAT	0.6906
2499	Mitoguardin 1	Miga1	A0A0G2K2T2_RAT	-0.0885
2500	Bcas3 protein	Bcas3	B0BN06_RAT	0.4181
2501	Similar to RIKEN cDNA 0610038D11 (Predicted), isoform CRA_b	Trmt112	B2RYS9_RAT	-0.5951
2502	Casein kinase 2 alpha 2	Csnk2a2	B4F7A9_RAT	0.1356
2503	Geranylgeranyl transferase type-2 subunit beta	Rabggtb	F1LSM6_RAT	-0.2311
2504	RNA transcription, translation and transport factor	Rtraf	F7EMB2_RAT	0.1390
2505	Potassium voltage-gated channel subfamily A member 6	Kcna6	G3V8L6_RAT	0.3237
2506	Integral membrane protein 2C	Itm2c	ITM2C_RAT	0.1354
2507	Exopolyphosphatase PRUNE1	Prune1	PRUNE_RAT	-0.0735
2508	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex assembly factor 3	Ndutf3	NDUF3_RAT	0.2423
2509			M0RA17_RAT	0.1051
2510	ASPSR1, UBX domain-containing tether for SLC2A4	Aspscr1	A0A0G2JWF4_RAT	0.2142
2511	Iron-sulfur cluster assembly 1 homolog, mitochondrial	Isca1	A0A0A0MXZ0_RAT	-0.5806
2512	Angel homolog 2	Angel2	F1LT13_RAT	0.1795
2513	RCG41110	Rmnd1	E9PU34_RAT	0.0924

2514	WD repeat domain 45B	Wdr45b	Q2MCP5_RAT	0.2842
2515	Splicing factor 3b, subunit 3	Sf3b3	E9PT66_RAT	-0.2012
2516	B2GV57_RAT	Cars2	B2GV57_RAT	-0.2072
2517	Ubiquilin 1, isoform CRA_a	Ubqln1	A0A140TAI1_RAT	-0.0284
2518	LSM12 homolog	Lsm12	D4A8G0_RAT	0.1443
2519	Uncharacterized protein	N/A	F1LWK7_RAT	-0.7797
2520	SPRY domain-containing protein 7	Spryd7	SPRY7_RAT	-0.5917
2521	RCG59854, isoform CRA_b	Xpnpep3	G3V9W4_RAT	-0.0091
2522	RCG20695, isoform CRA_b	Slirp	D4A4W6_RAT	0.4935
2523	LIM domain kinase 1	Limk1	G3V663_RAT	-0.1223
2524	A-kinase anchor protein 7 isoforms delta and gamma	Akap7	A0A0A0MXX1_RAT	0.2539
2525	NHP2-like protein 1	Snu13	NH2L1_RAT	-0.1184
2526	Syntaxin-binding protein 6	Stxbp6	D3ZCI5_RAT	-0.1082
2527	Prostaglandin E synthase 2	Ptges2	D4AE56_RAT	-0.0383
2528	Glucosidase 1	LOC103692 171	A0A0G2K8S6_RAT	-0.0338
2529	Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 2	Acap2	A0A0G2K4T3_RAT	0.0150
2530	Programmed cell death protein 10	Pdcd10	PDC10_RAT	-0.2021
2531	Emerin	Emd	EMD_RAT	0.2920
2532	Translin	Tsn	E9PT79_RAT	-0.2862
2533	Aplp1 protein	Aplp1	B1WBV6_RAT	-0.2797
2534	Importin subunit alpha	Kpna6	A0A0G2JZS1_RAT	0.0724
2535	Protein phosphatase 6, regulatory subunit 2	Ppp6r2	A0A0G2JV49_RAT	-0.0887
2536	Regulating synaptic membrane exocytosis 3,	Rims3	G3V7H4_RAT	-0.3491

	isoform CRA_a			
2537	Ferrochelatase	Fech	D3ZBM3_RAT	-0.0079
2538	Protein phosphatase inhibitor 2	Ppp1r2	IPP2_RAT	0.1398
2539	Acyl-CoA synthetase family member 3	Acsf3	D3ZUX7_RAT	0.0258
2540	Uncharacterized protein	N/A	A0A0G2JVM2_RAT	-0.3601
2541	Coenzyme A synthase	Coasy	Q5XIA5_RAT	0.9089
2542	Retinal dehydrogenase 1	Aldh1a1	A0A0H2UHP1_RAT	0.3246
2543	MINDY lysine 48 deubiquitinase 2	Mindy2	D3ZWA1_RAT	-0.5352
2544	IQ motif and SEC7 domain-containing protein 3	Iqsec3	F1LPA3_RAT	-0.2130
2545	RGD1559909	RGD1559909	D3ZK76_RAT	0.5801
2546	RCG21806	Rhof	D3ZRB3_RAT	0.5621
2547	Elongator complex protein 2	Elp2	ELP2_RAT	0.0810
2548	Armadillo repeat-containing protein 10	Arm10	ARM10_RAT	0.1912
2549	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit	Ppp2r5a	D3ZDI7_RAT	-0.1418
2550	Carboxypeptidase Q	Cpq	CBPQ_RAT	0.5801
2551	Protein-glutamate O-methyltransferase	Armt1	ARMT1_RAT	0.1493
2552	A0A0G2K7W4_RAT	Map4k4	A0A0G2K7W4_RAT	0.0269
2553	5'-AMP-activated protein kinase catalytic subunit alpha-1	Prkaa1	AAPK1_RAT	0.2075
2554	Golgi reassembly-stacking protein 2-like	LOC103690018	F6T071_RAT	-0.3394
2555			F7ESM5_RAT	0.3462
2556	Neurolysin (Metallopeptidase M3 family), isoform CRA_a	Nln	A0A0G2JSY3_RAT	0.0738

2557	Adhesion G-protein-coupled receptor G1	Adgrg1	F1LMW3_RAT	0.1040
2558	Peptidylprolyl isomerase	Fkbp3	B5DF03_RAT	-0.1212
2559	Cyclin-dependent kinase 14	Cdk14	D3ZSZ0_RAT	-0.6134
2560	Nucleoside diphosphate kinase	Nme3	Q99NI1_RAT	0.1699
2561	ADP-dependent glucokinase	Adpgk	G3V784_RAT	-0.9871
2562	Phenylalanine--tRNA ligase alpha subunit	Farsa	SYFA_RAT	0.2367
2563	Adhesion G protein-coupled receptor B3	Adgrb3	D4A831_RAT	-0.7277
2564	Kynurenine--oxoglutarate transaminase 3	Kyat3	KAT3_RAT	-0.4517
2565	Retinol dehydrogenase 14	Rdh14	D3ZUY0_RAT	-0.1281
2566	Family with sequence similarity 81, member A	Fam81a	D4A7T8_RAT	-0.3299
2567	Vesicle transport through interaction with t-SNAREs homolog 1B	Vti1b	F1LNC4_RAT	0.3363
2568	CD34 antigen (Predicted)	Cd34	B1PLB1_RAT	0.1097
2569	HECT, C2 and WW domain-containing E3 ubiquitin protein ligase 2	Hecw2	D4ADD3_RAT	0.1288
2570	Carnitine O-palmitoyltransferase 2, mitochondrial	Cpt2	CPT2_RAT	-0.1955
2571	LRP chaperone MESD	Mesd	MESD_RAT	0.2444
2572	RCG20801, isoform CRA_c	Vipas39	A0A0G2K5Y1_RAT	-0.3680
2573	Nischarin	Nisch	NISCH_RAT	0.0278
2574	RCG54604	Snrpd2	B5DES0_RAT	0.6075
2575	Similar to cDNA sequence BC017158	RGD13101 27	G3V8P5_RAT	-0.3069
2576	Actin-related protein 2/3 complex subunit 5	Arpc5	ARPC5_RAT	0.5202
2577	Mitochondrial import inner membrane translocase subunit Tim8 B	Timm8b	TIM8B_RAT	0.1075

2578	U4/U6.U5 tri-snRNP-associated protein 1	Sart1	SNUT1_RAT	-0.2121
2579	BSD domain-containing 1	Bsdc1	D4A3M7_RAT	-0.1254
2580	Importin subunit alpha	Kpna3	Q56R18_RAT	-0.2649
2581	Sulfotransferase 4A1	Sult4a1	ST4A1_RAT	0.0384
2582	NAD(P)H-hydrate epimerase	Naxe	NNRE_RAT	0.0557
2583	Coatomer subunit gamma	Copg2	A0A0H2UHV9_RAT	0.5656
2584	Ubiquitin carboxyl-terminal hydrolase 10	Usp10	UBP10_RAT	-0.0506
2585	AP complex subunit sigma	Ap3s1	B2RZ62_RAT	-0.0486
2586	Pyrroline-5-carboxylate reductase 3	Pycr3	P5CR3_RAT	0.4024
2587	Pcyox11 protein	Pcyox11	B5DEI0_RAT	0.2167
2588	Urea transporter	Slc14a1	M0R8C6_RAT	-0.1602
2589	m-AAA protease-interacting protein 1, mitochondrial	Maip1	CB047_RAT	-0.0544
2590	Small ubiquitin-related modifier	Sumo2	F1M2K3_RAT	0.0944
2591	CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase	Pgs1	D4A5W8_RAT	-0.5101
2592	Creatine kinase U-type, mitochondrial	Ckmt1	KCRU_RAT	-0.0566
2593	Splicing factor 3B subunit 4	Sf3b4	SF3B4_RAT	0.1968
2594	Mitochondrial import inner membrane translocase subunit TIM44	Timm44	G3V640_RAT	0.1265
2595	Unconventional myosin-Ic	Myo1c	MYO1C_RAT	-0.2407
2596	Protein phosphatase 2C, magnesium dependent, catalytic subunit, isoform CRA_a	Pdp1	A0A0G2QC17_RAT	-0.2523
2597	N-terminal EF-hand calcium-binding protein 2	Necab2	F1LQY6_RAT	-0.0590
2598	Leucine-rich repeat-containing protein 57	Lrrc57	A0A0G2KBC0_RAT	0.2742
2599	5-oxoprolinase	Oplah	OPLA_RAT	-0.0544

2600	S-phase cyclin A-associated protein in the ER	Scaper	F1LRM0_RAT	-0.3846
	Poly(A) binding protein, nuclear 1, isoform			
2601	CRA_a	Pabpn1	G3V7Z8_RAT	0.2306
2602	Histone acetyltransferase	Kat6a	A0A0A0MY12_RAT	-0.1210
2603	COMM domain-containing protein 3	Commd3	COMD3_RAT	-0.4951
2604	Tetratricopeptide repeat protein 39B	Ttc39b	TT39B_RAT	-0.4695
2605	Glycogen phosphorylase, liver form	Pygl	PYGL_RAT	-0.0193
	DnaJ heat shock protein family (Hsp40)			
2606	member C19	Dnajc19	M0R6L8_RAT	0.1629
	Kinase non-catalytic C-lobe			
2607	domain-containing 1	Kndc1	D4A8Q2_RAT	0.1172
2608	Endoplasmic reticulum lectin 1	Erlec1	D3ZF97_RAT	-0.6935
		LOC108348		
2609	Calpain small subunit 1-like	197	A0A0G2K6H7_RAT	-0.2546
2610	GDP-mannose pyrophosphorylase B	Gmppb	D4A746_RAT	-0.4282
2611	RAP2C, member of RAS oncogene family	Rap2c	D3ZK56_RAT	0.4516
	Protein transport protein Sec61 subunit alpha			
2612	isoform 1	Sec61a1	S61A1_RAT	0.2108
	Sodium- and chloride-dependent glycine			
2613	transporter 1	Slc6a9	SC6A9_RAT	0.2481
2614			A0A0A0MXV1_RAT	0.7046
2615	Bin1 protein	Bin1	Q5HZA7_RAT	-0.3109
	Smu-1 suppressor of mec-8 and unc-52			
2616	homolog (C. elegans)	Smu1	G3V702_RAT	-0.3970
2617	High affinity cationic amino acid transporter 1	Slc7a1	CTR1_RAT	-0.0378
2618	Acid phosphatase 6, lysophosphatidic	Acp6	Q4FZU0_RAT	0.3039
	Serine (Or cysteine) proteinase inhibitor,			
2619	clade H, member 1, isoform CRA_b	Serpinh1	Q5RJR9_RAT	-0.0716

2620	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	Hadh	HCDH_RAT	0.3305
2621	mRNA export factor	Rae1	RAE1L_RAT	0.2241
2622	Odr-4 GPCR localization factor homolog	Odr4	D3ZV63_RAT	-0.2677
2623	Uncharacterized protein	N/A	M0R7E6_RAT	-0.8542
2624	39S ribosomal protein L22, mitochondrial	Mrpl22	A0A0H2UHT3_RAT	-0.1374
2625	Tumor suppressor candidate 3	Tusc3	A0A0G2KAE2_RAT	0.0553
2626	Ankyrin repeat and BTB/POZ domain-containing protein BTBD11	Btbd11	D4AC89_RAT	-0.7213
2627	WD repeat domain 98	Rmc1	Q5PPI8_RAT	0.2481
2628	Transportin 3	Tnpo3	A0A0G2K8P2_RAT	0.6748
2629	Neural proliferation, differentiation and control, 1	Npdc1	Q6AY81_RAT	-0.1246
2630	Prefoldin subunit 3	Vbp1	M0R919_RAT	-0.3102
2631	Haloacid dehalogenase-like hydrolase domain-containing protein 2	Hdhd2	Q6QI86_RAT	0.2768
2632	Hypothetical protein LOC100362814	LOC100362814	F1LXC7_RAT	0.2375
2633	UBX domain-containing protein 1	Ubxn1	UBXN1_RAT	0.4569
2634	Dual specificity tyrosine-phosphorylation-regulated kinase 1A	Dyrk1a	DYR1A_RAT	-0.0513
2635	Eukaryotic translation initiation factor 3 subunit H	LOC108348062	D3ZL77_RAT	0.6075
2636	Potassium voltage-gated channel subfamily A member 4	Kcna4	G3V6L7_RAT	-0.1164
2637	Macrophage-capping protein	Capg	CAPG_RAT	0.0695
2638	Charged multivesicular body protein 2B	Chmp2b	F1M8B7_RAT	0.2200
2639	Palmitoyltransferase ZDHHC5	Zdhhc5	ZDHC5_RAT	-0.1661

2640	Ubiquitin-specific peptidase 12	Usp12	A0A0G2QC35_RAT	0.6977
2641	Uncharacterized protein	N/A	D3ZZN4_RAT	-0.0003
2642	Neuron navigator 3	Nav3	A0A0G2JZB7_RAT	-0.3206
2643	Host cell factor C1	Hcfc1	D3ZN95_RAT	0.4831
2644	BolA family member 2	Bola2	D4A9P7_RAT	0.0948
2645	Non-muscle caldesmon	Cald1	A0A0G2JTV2_RAT	-0.4061
2646	Vacuolar protein sorting-associated protein 41 homolog	Vps41	D3ZVH6_RAT	-0.8681
2647	Ubiquitin protein ligase E3A	Ube3a	F1M7B8_RAT	0.6105
2648	Tropomyosin 1, alpha, isoform CRA_a	Tpm1	Q923Z2_RAT	0.6749
2649	Uncharacterized protein	N/A	D3ZTX8_RAT	0.3162
2650	Thrombospondin type 1 domain-containing 7A	Thsd7a	F1MA97_RAT	-4.5756
2651	D-ribitol-5-phosphate cytidyltransferase	Ispd	A0A0G2K627_RAT	-0.1551
2652	Glycogen [starch] synthase, muscle	Gys1	GYS1_RAT	0.2469
2653	Tyrosine-protein phosphatase	Ptpn9	A0A0G2K6A2_RAT	0.4805
2654	Mitochondrial ribosomal protein L15	Mrpl15	A0A0G2K9B4_RAT	-1.2877
2655	ER membrane protein complex subunit 4	Emc4	D4A0W1_RAT	-0.1304
2656	Insulin receptor substrate 2	Irs2	F1MAL5_RAT	0.3644
2657	Four and a half LIM domains protein 1	Fhl1	A0A0G2K338_RAT	-0.1022
2658	Transferrin receptor protein 1	Tfrc	G3V679_RAT	-0.1274
2659	SH3 domain-binding protein 1	Sh3bp1	D3ZFI3_RAT	1.0347
2660	Calcium uptake protein 1, mitochondrial	Micu1	A0A0G2K0T5_RAT	-0.1386
2661	Protein quaking-like	LOC108348 175	A0A0G2JUS0_RAT	0.2670
2662	Signal peptidase complex subunit 2	Spcs2	D3ZD11_RAT	-0.0453

2663	Casein kinase I isoform gamma-3	Csnk1g3	A0A0A0MXY3_RAT	-0.0977
2664	Slingshot homolog 2 (Drosophila) (Predicted)	Ssh2	F1M4Q5_RAT	0.1950
2665	Dpy-19-like C-mannosyltransferase 1	Dpy19l1	D4AD75_RAT	-0.5120
2666	Dedicator of cytokinesis protein 9	Dock9	A0A0G2K2I6_RAT	0.1412
2667	Aspartate-beta-hydroxylase	Asph	A0A096MKE0_RAT	0.3826
2668	5'-AMP-activated protein kinase subunit beta-2	Prkab2	A0A0G2JVK3_RAT	0.7783
2669	Oxysterol-binding protein	Osbp16	A0A0G2JZR1_RAT	0.5462
2670	Amyloid-beta A4 precursor protein-binding family A member 2	Apba2	APBA2_RAT	0.4809
2671	Glyoxylate and hydroxypyruvate reductase	Grhpr	B0BN46_RAT	0.6217
2672	Sept9 protein	Sept9	B2GVB4_RAT	-0.0806
2673	Glutaredoxin-like protein	LOC100174 910	B2RYV3_RAT	0.3609
2674	Hypertrophic agonist responsive protein B64, isoform CRA_b	Iah1	B5DER3_RAT	0.6661
2675	Basic leucine zipper and W2 domain-containing protein 1	Bzw1	BZW1_RAT	0.0045
2676	Voltage-dependent calcium channel subunit alpha-2/delta-3	Cacna2d3	CA2D3_RAT	0.5131
2677	Coiled-coil domain-containing protein 47	Ccdc47	CCD47_RAT	-0.0032
2678	Chromogranin-A	Chga	CMGA_RAT	0.0473
2679	YTH N(6)-methyladenosine RNA-binding protein 3	Ythdf3	D3ZIJ3_RAT	0.6389
2680	Uncharacterized protein	N/A	D3ZJK8_RAT	-0.2127
2681	Ankyrin repeat domain 13 family, member D (Predicted)	Ankrd13d	D3ZUJ7_RAT	-0.1215
2682	Pleckstrin and Sec7 domain-containing 3	Psd3	D3ZUW0_RAT	0.1324

	Parkinson disease 7 domain containing 1	LOC100911		
2683	(Predicted), isoform CRA_a	365	D3ZVI9_RAT	-0.2291
	Protein phosphatase 1, regulatory subunit			
2684	16A	Ppp1r16a	D3ZVR8_RAT	0.1356
2685	Ly6/neurotoxin 1	Lynx1	D4A6F2_RAT	-0.7061
2686	RCG48672	Snrpf	D4AAT4_RAT	-0.2226
2687	Uncharacterized protein	N/A	D4AE02_RAT	0.6226
	Double C2-like domain-containing protein			
2688	alpha	Doc2a	DOC2A_RAT	-0.1653
2689	Dipeptidyl peptidase 2	Dpp7	DPP2_RAT	-0.1107
	Translation initiation factor eIF-2B subunit			
2690	beta	Eif2b2	EI2BB_RAT	-0.5367
	Gamma-aminobutyric acid receptor subunit			
2691	alpha-2	Gabra2	F1LMU7_RAT	0.3601
2692	EARP-interacting protein	Eipr1	F1LNX7_RAT	0.0595
2693	Peptidyl-prolyl cis-trans isomerase FKBP1B	Fkbp1b	FKB1B_RAT	0.1892
2694	G protein beta subunit-like, isoform CRA_a	Mlst8	G3V7F1_RAT	1.9284
2695	Erythrocyte membrane protein band 4.1-like 3	Epb41l3	G3V874_RAT	0.0865
	Signal peptidase complex catalytic subunit			
2696	SEC11	Sec11c	G3V878_RAT	0.0673
2697	Glucose-6-phosphatase 3	G6pc3	G6PC3_RAT	-0.1700
2698	Histone H2A type 2-A	Hist2h2aa3	H2A2A_RAT	-0.1501
	Potassium voltage-gated channel subfamily A			
2699	member 1	Kcna1	KCNA1_RAT	0.2952
2700	Protein lifeguard 2	Faim2	LFG2_RAT	-0.2757
2701	Apolipoprotein D	Apod	M0R4S2_RAT	-0.1433
2702	RAS-related C3 botulinum substrate 3	Rac3	M0R5T4_RAT	-0.3514

2703	Prostaglandin-H2 D-isomerase	Ptgds	PTGDS_RAT	-0.3565
2704	DnaJ (Hsp40) homolog, subfamily A, member 4	Dnaja4	Q4QR73_RAT	-0.3760
2705	E3 ubiquitin-protein ligase	Wwp1	Q4V8H7_RAT	0.3791
2706	ATPase, H+ transporting, lysosomal accessory protein 1	Atp6ap1	Q6IRF8_RAT	0.3191
2707	Ab1-205	Surf4	Q7TP91_RAT	-0.4686
2708	26S proteasome subunit S5a	Psmc4	Q9ESH1_RAT	-0.5249
2709	Agrin	N/A	Q9JK93_RAT	-0.0104
2710	Translocon-associated protein subunit gamma	Ssr3	SSRG_RAT	-0.0835
2711	Transmembrane protein 126A	Tmem126a	T126A_RAT	0.3838
2712	von Willebrand factor A domain-containing protein 1	Vwa1	VWA1_RAT	-0.1493
2713	Ral GTPase-activating protein subunit beta	Ralgapb	A0A0G2K0K8_RAT	0.0494
2714	Tyrosine-protein kinase	LOC100909750	D3ZGM3_RAT	-0.2128
2715	Vesicle transport protein SEC20	Snip1	SEC20_RAT	-0.0123
2716	Uncharacterized protein	N/A	F1LUD4_RAT	0.5722
2717	Transmembrane protein 38a (Predicted), isoform CRA_b	Tmem38a	G3V9T4_RAT	0.0621
2718	SAP domain-containing ribonucleoprotein	Sarnp	SARNP_RAT	0.4044
2719	Sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (Semaphorin) 7A (Predicted)	Sema7a	D3ZQP6_RAT	0.9243
2720	DnaJ heat shock protein family (Hsp40) member C7	Dnajc7	A0A0G2K435_RAT	0.0356
2721	Peptidyl-prolyl cis-trans isomerase F, mitochondrial	Ppif	PPIF_RAT	-0.3509

2722	Lymphocyte specific 1, isoform CRA_a	Lsp1	Q4QQV6_RAT	-0.5205
2723	Fibrillarin-like 1	Fbl11	D3ZVA5_RAT	-0.4594
2724	Cleavage and polyadenylation specific factor 5	Nudt21	B4F764_RAT	0.3327
2725	Glutaredoxin-2, mitochondrial	Glrx2	GLRX2_RAT	0.2041
2726	ATP-binding cassette subfamily E member 1	Abce1	D3ZD23_RAT	0.0639
2727	Serine/threonine kinase 32C	Stk32c	D4A3D9_RAT	-0.8898
2728	Coiled-coil domain-containing 155	Ccdc155	D3ZPX3_RAT	-0.4039
2729	Phosphatidylinositol 3-kinase regulatory subunit beta	Pik3r2	P85B_RAT	0.1250
2730	Component of oligomeric golgi complex 3	Cog3	Q5XHZ8_RAT	0.0590
2731	Ras-related GTP-binding C	Rragc	Q0D2L6_RAT	-0.4284
2732	Protein ERGIC-53	Lman1	A0A0G2JXC1_RAT	-0.6149
2733	Pyridine nucleotide-disulfide oxidoreductase domain-containing protein 2	Pyroxd2	PYRD2_RAT	0.2228
2734	Uncharacterized protein	N/A	D3Z8J0_RAT	-0.0484
2735	Solute carrier family 2, facilitated glucose transporter member 2	Slc2a2	GTR2_RAT	0.6021
2736	SRY box 6	Sox6	A0A0G2JTZ2_RAT	-0.2493
2737	High mobility group protein HMG-I/HMG-Y	Hmga1	HMGA1_RAT	-0.6046
2738	Adenylate cyclase type 2	Adcy2	ADCY2_RAT	0.1685
2739	RNA 3'-terminal phosphate cyclase	Rtca	Q68FS8_RAT	0.1775
2740	Mov10 RISC complex RNA helicase-like 1	Mov10l1	D3ZH42_RAT	0.0968
2741	Epoxide hydrolase 1	Ephx1	HYEP_RAT	0.2849
2742	Sodium-dependent serotonin transporter	Slc6a4	SC6A4_RAT	0.0634
2743	SPRY domain-containing protein 4	Spryd4	SPRY4_RAT	0.4559

2744	Mitochondrial import inner membrane translocase subunit Tim10 B	Timm10b	T10B_RAT	0.3774
2745	BUB3 mitotic checkpoint protein	Bub3	Q4FZS2_RAT	0.6552
2746	Uncharacterized protein	N/A	A0A096P6M7_RAT	0.0664
2747			A0A0A0MXV5_RAT	-0.3562
2748	Atlastin-3	Atl3	A0A0G2JSS9_RAT	0.7195
2749	Polypyrimidine tract-binding protein 1	Ptbp1	A0A0G2JTV1_RAT	-0.4705
2750	Protein IWS1 homolog	Iws1	A0A0G2JWE3_RAT	0.5601
2751	Uncharacterized protein	N/A	A0A0G2JXF0_RAT	-0.0127
2752	Xenotropic and polytropic retrovirus receptor 1	Xpr1	A0A0G2JXZ7_RAT	-0.1812
2753	Selenoprotein M	Selenom	A0A0G2JZZ4_RAT	-0.3586
2754	3'-phosphoadenosine 5'-phosphosulfate synthase 1	Papss1	A0A0G2K0L0_RAT	-0.3716
2755	E3 UFM1-protein ligase 1	Ufl1	A0A0G2K266_RAT	-0.1631
2756	Splicing factor 3a, subunit 3	Sf3a3	A0A0G2K2X3_RAT	0.7435
2757	Ubiquitin carboxyl-terminal hydrolase 30	Usp30	A0A0G2K3K1_RAT	-0.1978
2758	ADP-ribosylation factor GTPase-activating protein 3	Arfgap3	A0A0G2K4J0_RAT	-1.6477
2759	WAS protein family, member 2	Wasf2	A0A0G2K5T9_RAT	0.6213
2760	Patatin-like phospholipase domain-containing 8	Pnpla8	A0A0G2K621_RAT	0.1815
2761	WD repeat-containing protein 61	Wdr61	A0A0G2K648_RAT	0.1588
2762	Diacylglycerol kinase	Dgkz	A0A0G2K707_RAT	0.5443
2763	DnaJ homolog subfamily C member 8	Dnajc8	A0A0G2K751_RAT	0.2556
2764	SH3 domain-binding glutamic acid-rich-like protein	Sh3bgrl2	A0A0G2K8I0_RAT	0.3004

2765	Ubiquitin-specific peptidase 32	Usp32	A0A0G2K952_RAT	-0.3145
2766	StAR-related lipid transfer domain-containing 10	Stard10	A0A0G2KB11_RAT	0.5404
2767	Reticulon	Rtn3	A0A0H2UHX1_RAT	-0.2748
2768	SH3 and multiple ankyrin repeat domains protein 3	Shank3	A0A0U1RS13_RAT	0.1312
2769	Glial fibrillary acidic protein epsilon	Gfap	A1E252_RAT	-0.8924
2770	Organic solute carrier protein 1	OSCP1	A7VLG3_RAT	0.0078
2771	Ly6/Plaur domain containing 1	Lypd1	A9CMA2_RAT	0.3105
2772	Short-chain specific acyl-CoA dehydrogenase, mitochondrial	Acads	ACADS_RAT	-0.1251
2773	NADPH:adrenodoxin oxidoreductase, mitochondrial	Fdxr	ADRO_RAT	-0.3288
2774	ADP-ribosylation factor 4	Arf4	ARF4_RAT	-0.0616
2775	Lectin, mannose-binding 2	Lman2	B0BNG3_RAT	0.1788
2776	FMR1 autosomal homolog 2	Fxr2	B1H2A6_RAT	0.2795
2777	Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase	B3gat3	B2GV35_RAT	0.0620
2778	Armadillo repeat-containing protein 6	Arm6	B2RYL4_RAT	-0.1173
2779	Arginine-rich, mutated in early stage tumors (Predicted), isoform CRA_b	Manf	B2RZ09_RAT	0.7826
2780	RCG41580, isoform CRA_a	Rpl22l1	B2RZD5_RAT	-0.4970
2781	Galectin	Lgalsl	B4F7A3_RAT	0.0345
2782	Dual specificity protein phosphatase 15	Dusp15	B4F7B7_RAT	0.6707
2783	Programmed cell death protein 6	Pdcd6	B5DEP1_RAT	0.1375
2784	Sorting nexin	Snx6	B5DEY8_RAT	-0.7108
2785	BRISC and BRCA1-A complex member 2	Babam2	BRE_RAT	-0.1701

2786	Cholecystokinin	Cck	CCKN_RAT	0.0177
2787	Uncharacterized protein C6orf136 homolog	N/A	CF136_RAT	-0.4339
2788	Spliceosome-associated protein CWC15 homolog	Cwc15	CWC15_RAT	-0.1242
2789	RCG25747	Tusc2	D3Z8Q5_RAT	-0.2627
2790	Uncharacterized protein	N/A	D3ZAK6_RAT	0.8563
2791	PYM homolog 1, exon junction complex-associated factor	Pym1	D3ZGY1_RAT	-1.3716
2792	AKT1 substrate 1	Akt1s1	D3ZH75_RAT	0.3785
2793	Family with sequence similarity 169, member A	Fam169a	D3ZKX8_RAT	-0.1901
2794	Phosphodiesterase 6D	Pde6d	D3ZRD3_RAT	-0.2850
2795	COP9 (Constitutive photomorphogenic) homolog, subunit 7b (Arabidopsis thaliana) (Predicted), isoform CRA_b	Cops7b	D3ZU52_RAT	0.0995
2796	Methylthioribulose-1-phosphate dehydratase	Apip	D3ZUI1_RAT	-0.2962
2797	Iron-sulfur cluster assembly 2	Isca2	D4A4L5_RAT	-0.3531
2798	OCIA domain-containing 2	Ociad2	D4A4Q4_RAT	-1.1711
2799	Coatomer protein complex, subunit zeta 1	Copz1	D4A8T3_RAT	-0.1964
2800	Estradiol 17-beta-dehydrogenase 11	Hsd17b11	DHB11_RAT	0.1159
2801	Spartin	Spart	E9PT90_RAT	0.1801
2802	ER membrane protein complex subunit 10	Emc10	EMC10_RAT	-0.1444
2803	Uncharacterized protein	N/A	F1LM19_RAT	0.1373
2804	Granulins	Grn	F1LMP7_RAT	-0.0455
2805	Misshapen-like kinase 1	Mink1	F1LN69_RAT	0.3241
2806	Protein Mpv17	Mpv17	F1LNG8_RAT	1.2333
2807			F1LRB7_RAT	0.2109

2808	Splicing factor 1	Sf1	F1LSC3_RAT	-0.6902
2809	Zyg-11 family member B, cell cycle regulator	Zyg11b	F1M8P2_RAT	0.5821
2810	Mitochondrial ribosomal protein S18B	Mrps18b	F6Q5K7_RAT	-0.2106
2811	NPC intracellular cholesterol transporter 2	Npc2	F7FJQ3_RAT	-0.3588
2812	Bis(5'-adenosyl)-triphosphatase	Fhit	FHIT_RAT	-0.0396
2813	FUN14 domain-containing protein 1	Fundc1	FUND1_RAT	0.5761
2814	Similar to sid2057p	RGD13117 03	G3V8R0_RAT	-0.4694
2815	Integral membrane protein 2B	Itm2b	ITM2B_RAT	-0.3253
2816	Inward rectifier potassium channel 16	Kcnj16	KCJ16_RAT	0.3840
2817	Leucine-rich repeat-containing protein 73	Lrrc73	LRC73_RAT	0.0967
2818	Nuclear cap-binding protein subunit 2	Ncbp2	NCBP2_RAT	-0.1854
2819	Neuronal vesicle trafficking-associated protein 1	Nsg1	NSG1_RAT	-0.2599
2820	Nucleoporin NUP35	Nup35	NUP53_RAT	-1.3653
2821	Ankyrin	N/A	P97582_RAT	0.1334
2822	Peflin	Pef1	PEF1_RAT	0.4581
2823	Protein phosphatase 1 regulatory subunit 1A	Ppp1r1a	PPR1A_RAT	-0.0023
2824	Proteasome subunit beta type-2	Psmb2	PSB2_RAT	0.1740
2825	Tyrosine-protein phosphatase non-receptor type 1	Ptpn1	PTN1_RAT	-0.1664
2826	STARD3 N-terminal like, isoform CRA_a	Stard3nl	Q5U205_RAT	-0.2343
2827	Mitochondrial fission process 1	Mtfp1	Q5XIG9_RAT	-0.0219
2828	Poly(rC)-binding protein 2	Pcbp2	Q6AYU5_RAT	-0.0160
2829	Chemokine (C-X3-C motif) ligand 1	Cx3cl1	Q6IRF7_RAT	-0.2817
2830	BWK-1	Gid8	Q6YDN8_RAT	-0.1130

2831	Asc-type amino acid transporter 1	Slc7a10	Q75T81_RAT	-0.1057
2832	Amino acid transporter	Slc1a2	Q8K5B5_RAT	0.8003
2833	Ras-related protein Rab-9A	Rab9a	RAB9A_RAT	-0.6150
2834	Solute carrier family 22 member 17	Slc22a17	S22AH_RAT	0.0814
2835	Solute carrier family 35 member F6	Slc35f6	S35F6_RAT	0.3183
2836	SUMO-activating enzyme subunit 1	Sae1	SAE1_RAT	0.0933
2837	Translocon-associated protein subunit delta	Ssr4	SSRD_RAT	-0.3977
2838	Type 1 phosphatidylinositol 4,5-bisphosphate 4-phosphatase	Pip4p1	TM55B_RAT	0.8197
2839	Tyrosine 3-monooxygenase	Th	TY3H_RAT	-0.0194
2840	DDX3Y	DDX3Y	W8BZ34_RAT	0.3037
2841	N-acetylaspertate synthetase	Nat8l	NAT8L_RAT	-0.2253
2842	RAN-binding protein 3	Ranbp3	M0R5Q3_RAT	0.3084
2843	Histone cell cycle regulation defective interacting protein 5 (Predicted), isoform CRA_a	Nfu1	D3ZA85_RAT	0.4097
2844	Serine (Or cysteine) peptidase inhibitor, clade C (Antithrombin), member 1	Serpinc1	Q5M7T5_RAT	-0.6781
2845	Pyridoxine-5'-phosphate oxidase	Pnp0	PNPO_RAT	0.1332
2846	Dolichyl-phosphate mannosyltransferase subunit 3	Dpm3	D3ZIJ5_RAT	-0.3267
2847	Phosphodiesterase	Pde4b	D3ZLB2_RAT	-0.2949
2848	G-rich RNA sequence-binding factor 1	Grsf1	F1LRK4_RAT	0.6116
2849	Equilibrative nucleoside transporter 1	Slc29a1	S29A1_RAT	-0.6080
2850	Coiled-coil domain-containing 115	Ccdc115	B2GV96_RAT	0.0165
2851	Haloacid dehalogenase-like hydrolase domain-containing 3	Hdhd3	B2RYT7_RAT	0.4863

	Guanine nucleotide-binding protein subunit			
2852	gamma	N/A	F2Z3T8_RAT	-0.5924
2853	Reticulon	Rtn1	M0R608_RAT	0.3162

Table S2. The up- or down-regulated proteins in the MD of rats upon

RWIS for 4 h by iTRAQ method.

Protein No.	Protein name	Gene name	Accession No.	LogRatio
Up-regulated proteins				
1	RCG39552, isoform CRA_a	Spon1	Q3B7D6_RAT	0.7874
2	Splicing factor 3a, subunit 3	Sf3a3	A0A0G2K2X3_RAT	0.7435
3	Atxn2 protein	Atxn2	B5DFB6_RAT	0.7311
4	Cell division cycle 16	Cdc16	A0A0G2JT88_RAT	0.6906
5			F1M742_RAT	0.6813
6	Tropomyosin 1, alpha, isoform CRA_a	Tpm1	Q923Z2_RAT	0.6749
7		Tnpo3	A0A0G2K8P2_RAT	0.6748
8	transportin 3 T	Ythdf3	D3ZIY3_RAT	0.6389
9	YTH N(6)-methyladenosine RNA-binding protein 3	Wasf2	A0A0G2K5T9_RAT	0.6213
10	WAS protein family, member 2	Slc2a2	GTR2_RAT	0.6021
11	Solute carrier family 2,	Dis3l	DI3L1_RAT	0.5780
12	facilitated glucose transporter member 2	Cnpy2	A0JN30_RAT	0.5636
13		Rnf141	RN141_RAT	0.5207
14	DIS3-like exonuclease 1	najc11	B1WBY5_RAT	0.5093
15	Canopy 2 homolog (Zebrafish)	Araf	ARAF_RAT	0.5047
16	RING finger protein 141	Hdhd3	B2RYT7_RAT	0.4863
17	DnaJ (Hsp40) homolog, subfamily C, member 11	Ptpn9	A0A0G2K6A2_RAT	0.4805
18	Serine/threonine-protein kinase A-Raf	Anxa4	ANXA4_RAT	0.4405
19		Plppr4	G3V864_RAT	0.4023
20	Haloacid dehalogenase-like hydrolase domain containing 3	Psmc5	PRS8_RAT	0.4017

21	Tyrosine-protein phosphatase non-receptor type 9	LOC652956	Q5BK33_RAT	0.3979
22	Annexin A4	Kcnab2	KCAB2_RAT	0.3827
23	Phospholipid phosphatase-related protein type 4	Crtac1	A0A096MJM0_RAT	0.3755
24	26S proteasome regulatory subunit 8	Dnajb1	B0K030_RAT	0.3580
25	p55 protein	Tollip	TOLIP_RAT	0.3502
26	Voltage-gated potassium channel subunit beta-2	Gstm3	GSTM4_RAT	0.3437
27	Cartilage acidic protein 1	Rnf214	D4A3V4_RAT	0.3246
28	DnaJ (Hsp40) homolog, subfamily B, member 1 (Predicted), isoform CRA_b	Cbr1	A0A0G2JSV2_RAT	0.3219
29	Toll-interacting protein	Snx12	A0A096MKE2_RAT	0.3140
30	Glutathione S-transferase Yb-3	Gja1	CXA1_RAT	0.3014
31	Ring finger protein 214	Hsd17b4	DHB4_RAT	0.2682
	Carbonyl reductase [NADPH] 1			
	Sorting nexin 12			
	Gap junction alpha-1 protein			
	Peroxisomal multifunctional enzyme type 2			
Down-regulated proteins				
1	Thrombospondin type 1 domain-containing 7A	Thsd7a	F1MA97_RAT	4.5756
2	Rho GTPase-activating protein 21	Arhgap21	F1LXQ7_RAT	0.8601
3		Gsk3b	A0A0G2JSH4_RAT	0.7146

4	Glycogen synthase kinase 3 beta, isoform CRA_b	Lynx1	D4A6F2_RAT	0.7061
5	Ly6/neurotoxin 1	Unk	D3ZV40_RAT	0.6526
6	Unkempt family zinc finger	N/A	F2Z3T8_RAT	0.5924
7	Guanine nucleotide-binding protein subunit gamma	Cbs	CBS_RAT	0.5831
8	Cystathionine beta-synthase	Rab31	A0A0G2JSZ1_RAT	0.5632
9	Ras-related protein Rab-31	Cdkl5	D3ZG85_RAT	0.5446
10	Cyclin-dependent kinase-like 5	Ptbp1	A0A0G2JTV1_RAT	0.4705
11	Polypyrimidine tract-binding protein 1	Atrn	ATRN_RAT	0.4660
12	Attractin	Fxyd1	A0A0H2UHS8_RAT	0.4614
13	FXYP domain-containing ion transport regulator	Kyat3	KAT3_RAT	0.4517
14	Kynurenine--oxoglutarate transaminase 3	Wasl	F1LSG0_RAT	0.4446
15	Neural Wiskott-Aldrich syndrome protein	Hnrnpf	HNRPF_RAT	0.4153
16	Heterogeneous nuclear ribonucleoprotein F	Them6	THEM6_RAT	0.4110
17	Protein THEM6	Eif2s3	IF2G_RAT	0.3983
18	Eukaryotic translation initiation factor 2 subunit 3, X-linked	Pitpnm2	A0A0G2JW50_RAT	0.3891
19	Phosphatidylinositol transfer protein, membrane-associated 2	Ssbp1	A0A0G2K747_RAT	0.3825
20	Single-stranded DNA binding protein 1, isoform CRA_b	Zfr2	D4A148_RAT	0.3675
21	Zinc finger RNA-binding	Kbtbd11	D4A5J1_RAT	0.3610
22		Rpl18a	RL18A_RAT	0.3609
23		Acsl5	ACSL5_RAT	0.3587
24		Ptgds	PTGDS_RAT	0.3565
25		Pon2	PON2_RAT	0.3544
26		Rims3	G3V7H4_RAT	0.3491
27		Itga6	G3V667_RAT	0.3376
28		Psma3	PSA3_RAT	0.3359

29	protein 2	Arcn1	COPD_RAT	0.3320
30	Kelch repeat and BTB domain-containing 11	Nav3	A0A0G2JZB7_RAT	0.3206
31	60S ribosomal protein L18a	Calu	G3V6S3_RAT	0.3071
32	Long-chain-fatty-acid--CoA ligase 5	Sec31a	A0A0G2K0X9_RAT	0.2903
33	Prostaglandin-H2 D-isomerase	Rpl3	RL3_RAT	0.2796
34	Serum paraoxonase/arylesterase 2	Camk2d	KCC2D_RAT	0.2756
	Regulating synaptic membrane exocytosis 3, isoform CRA_a			
	Integrin subunit alpha 6			
	Proteasome subunit alpha type-3			
	Coatomer subunit delta			
	Neuron navigator 3			
	Calumenin			
	Protein transport protein Sec31A			
	60S ribosomal protein L3			
	Calcium/calmodulin-dependent protein kinase type II subunit delta			