

## Supplemental Data

### Supplementary figure 1

**Electron microscopy of immunoisolated vesicles.** Electron microscopy (EM) of an enriched SV fraction (LP2) used as starting material for the immunoisolation of VGLUT-1 and VGAT specific SVs subpopulations (upper left corner). Immunoisolation of VGLUT-1 (upper right and lower left corner) and VGAT (lower right corner) specific SVs. The immunobeads bind a homogeneous organelle population with the size and shape of SVs (~ 40 nm).

### Supplementary figure 2

Flow-chart describing the procedures for preparing a starting fraction of enriched SVs (A), and for immunoisolation and comparative quantitative proteomics of proteins on VGLUT-1 and VGAT specific SVs (see Methods for details). Abbreviation: IP, Immunoprecipitation /immunoisolation.

### Supplementary figure 3

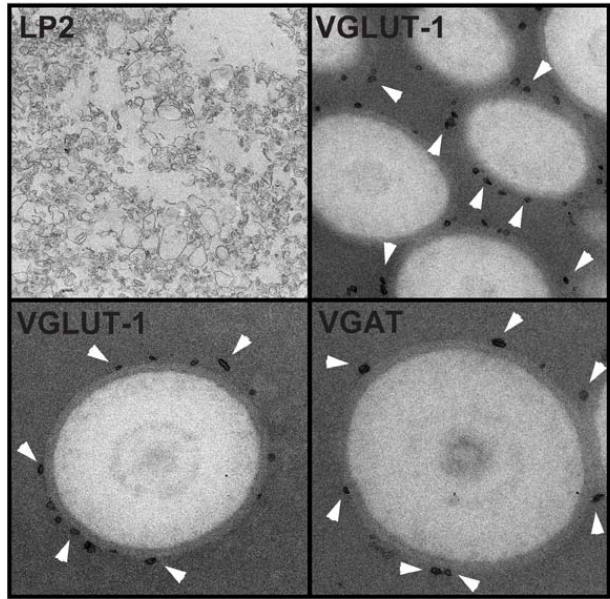
**Normalization of MS-data.** The peptide ratios (VGLUT-1/VGAT) for the three independent biological replicates were normalized to correct for systematic bias. Box plots of  $\log_2$  transformed (A) raw and (B) normalized VGLUT-1/VGAT ratios. (A) The raw VGLUT-1/VGAT peptide ratios were for all three replicates above zero indicating unequal protein amounts. (B) Normalization of the peptide ratios resulted in a balanced distribution of the ratios around zero (i.e. 1:1 ratio) for all three replicates (Rep.1- Rep.3) and for the combined protein ratios (Ave.) Normalization of the data was done by dividing the peptide ratios from each replicate by their mean ratios. The box plots represent the interquartile range (IQR) of 25-75%, the center line the median and the whiskers (horizontal lines) extend up to 1.5-fold of the IQR range. Protein ratios outside the whiskers are considered to be significantly different between VGLUT-1 and VGAT specific vesicles.

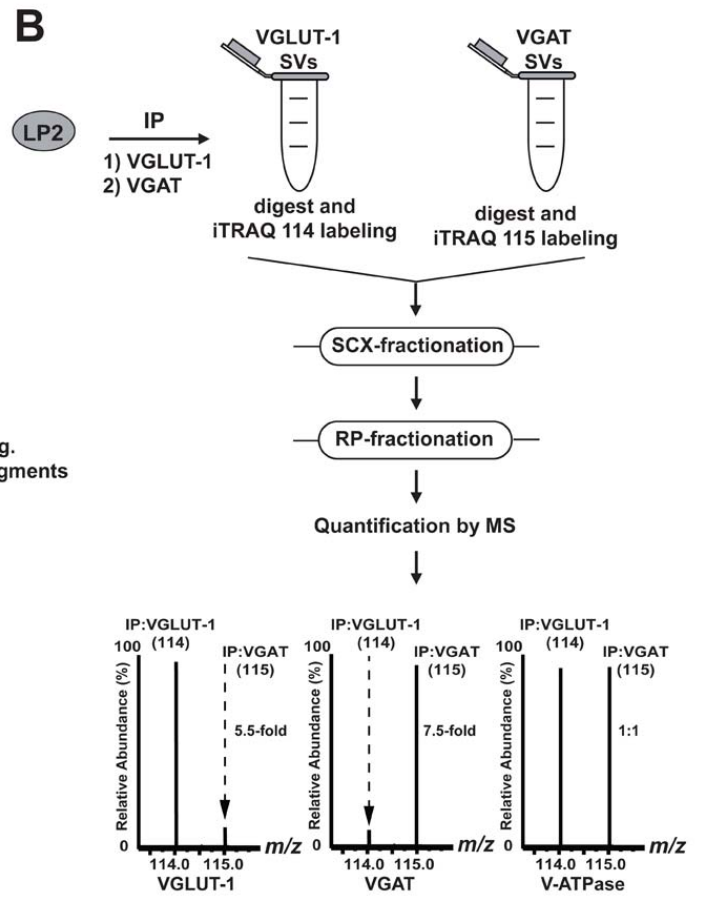
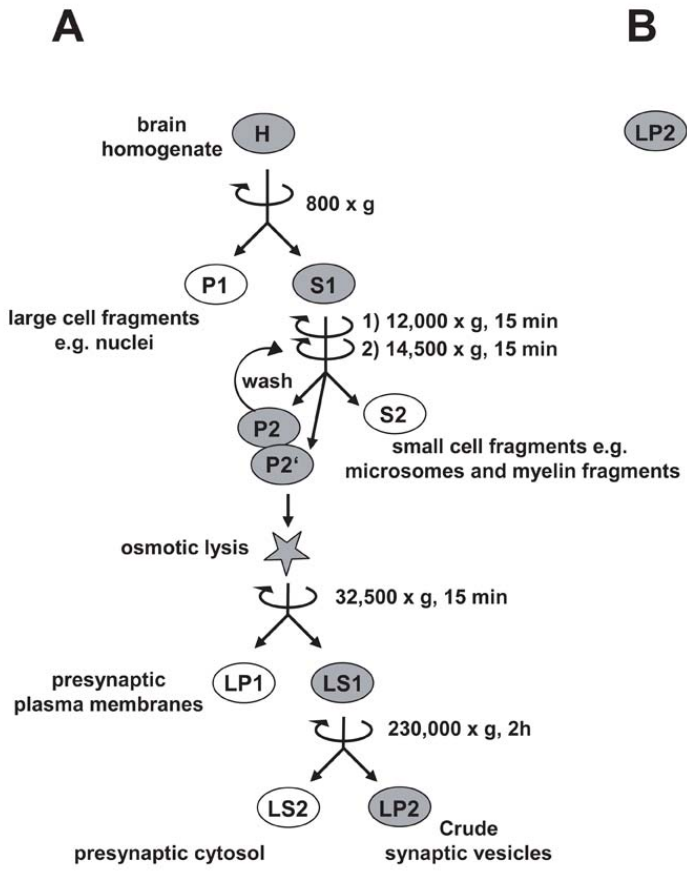
#### **Supplementary figure 4**

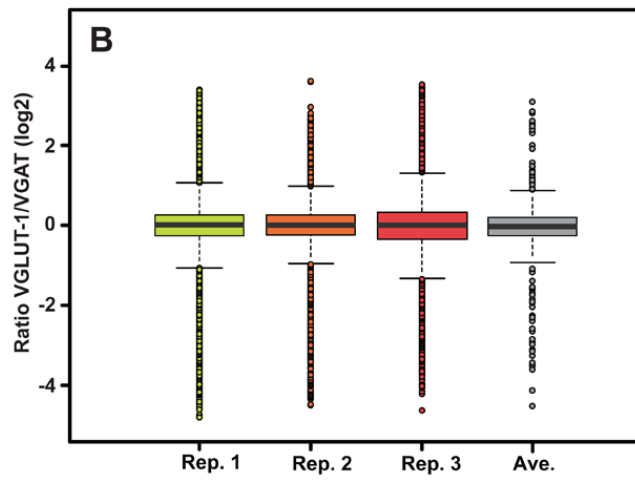
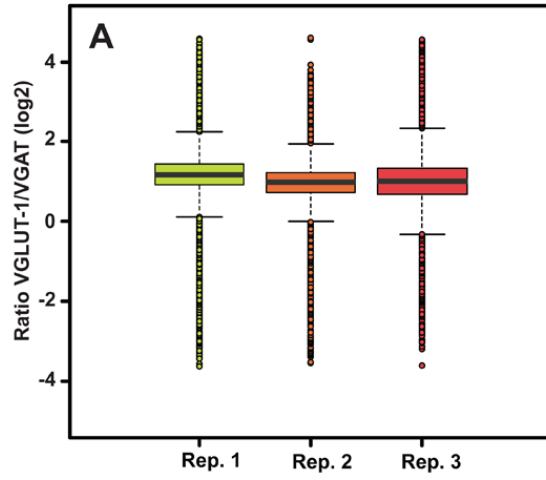
**Immunofluorescence of SV2A and SV2B and EM analysis MAL2.** (A) Fluorescence microscopic analysis of SV2A and (B) SV2B (red) with either VGLUT-1 or VGAT (green) in mouse hippocampal sections. Bar represents 100  $\mu\text{m}$ . Double immunogold labeling of the rat cerebellar cortex in a parallel fiber terminal of the molecular layer (C) and in a mossy fiber terminal of the granule cell layer (D) indicates the synaptic and vesicular coexistence of MAL2 (10 nm gold) and VGLUT-1 (5 nm gold). Inserts represent a detail showing the presumable coexistence of VGLUT-1 and MAL2 at the same vesicles. The inserts are areas from independent samples are therefore not marked in the overview.

#### **Supplementary figure 5**

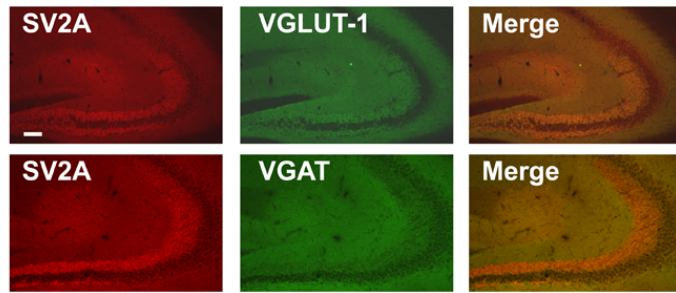
**Characterization of the rabbit antibody raised against MAL2.** The MAL2 antiserum recognizes a single major band at the expected size of 20 kDa (second lane) in an enriched fraction of SVs (LP2 fraction) which is not recognized by the pre-immune serum (first lane). Specificity of the antibody was checked by preincubating the antiserum with an excess of the peptide used for immunization (third lane, MAL2 Ab + pep1), resulting in a disappearance of the major 20 kDa band. No effect was observed when a control peptide was used instead (fourth lane, MAL2 Ab + pep2) (See Methods for more details).



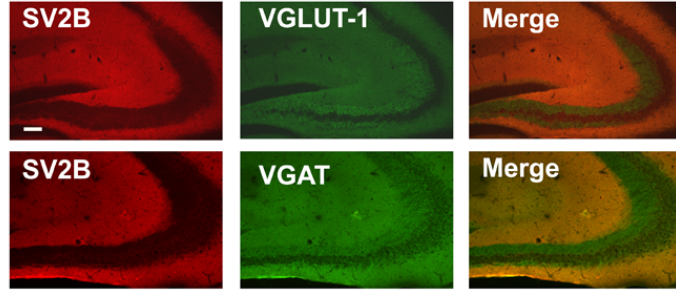




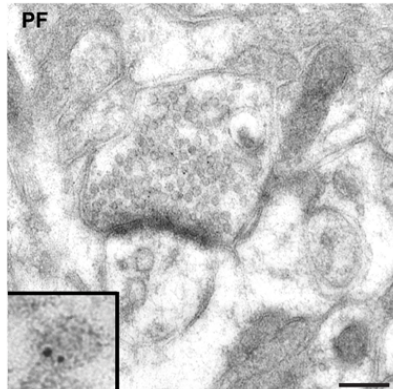
**A**



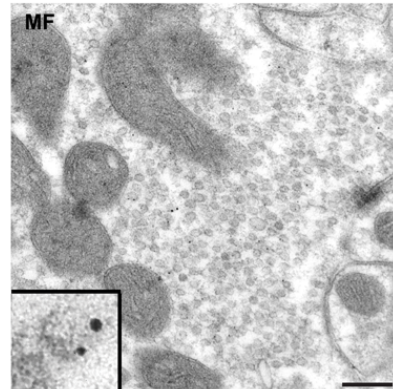
**B**

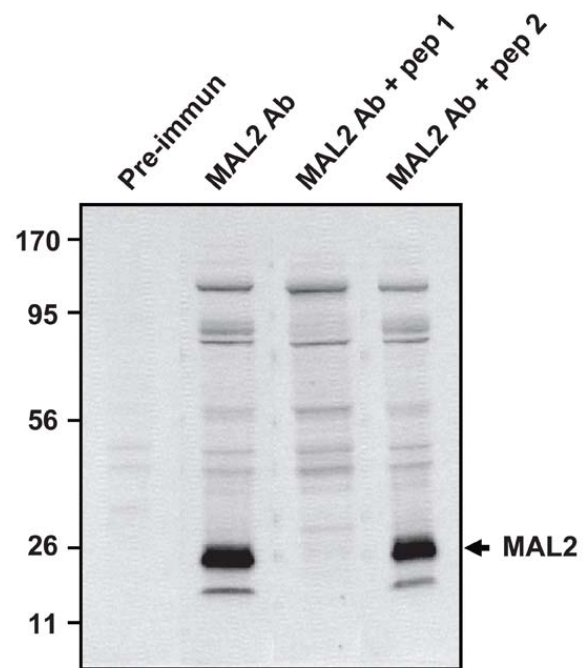


**C**



**D**





Supplemental Table 1. Proteins identified and quantified by mass spectrometry.

Protein Group	GI #	Protein name	Prot Ratio (Ave for IPs)	S.D. (ratio for IPs)	VGLUT-1/VGAT Ratio biological replicate 1	VGLUT-1/VGAT Ratio biological replicate 2	VGLUT-1/VGAT Ratio biological replicate 3	Total # of peptides used for quantitation	ID in # replicates	Mascot Prot hit #	Mascot protein score	See end of Supp. Table 1 for defefition	Identified in Takamori et al.	
SNARE proteins (Trafficking)	gij13591882	SNAP 25	1.537	0.032	1.521	1.574	1.516	44	3	111	1335	•	Yes	
	gij62751974	SNAP 29	1.105	N/A			1.105	3	1	451	70	•	Yes	
	gij40786477	SNAP 47	N/A	0.099		1.100	1.240	2	2	342	120	▲	Yes	
	gij77695930	syntaxin 13	1.049	0.088	1.087	0.949	1.113	21	3	199	358	•	Yes	
	gij109471437	Syntaxin 16	0.856	0.008	0.851	0.853	0.865	15	3	272	198	•	Yes	
	gij33667087	syntaxin 1A	2.156	0.685	2.049	1.530	2.887	89	3	69	2216	•	Yes	
	gij6981600	syntaxin 1B	1.129	0.053	1.067	1.156	1.164	169	3	34	3786	•	Yes	
	gij55741787	syntaxin 7	0.957	0.183	0.862	1.168	0.841	10	3	729	29	•	Yes	
	gij76443677	VAMP 1	1.255	0.052	1.196	1.278	1.292	79	3	84	1715	•	Yes	
	gij6981614	VAMP 2	1.368	0.076	1.318	1.331	1.455	132	3	21	5146	•	Yes	
	gij16758296	VAMP 7	1.214	0.036	1.230	1.239	1.173	16	3	209	304	•	Yes	
Endocytosis related proteins	gij157823677	AP-2a1	0.929	0.021	0.912	0.953	0.923	398	3	5	8571	•	Yes	
	gij162138932	AP-2a2	0.939	0.021	0.918	0.960	0.940	336	3	10	7155	•	Yes	
	gij18034787	AP-2b1	0.976	0.041	0.992	0.929	1.006	242	3	19	5363	•	Yes	
	gij16758938	AP-2m1	0.931	0.029	0.954	0.898	0.942	258	3	38	3652	•	Yes	
	gij56961624	AP-2s1	0.922	0.043	0.923	0.965	0.879	89	3	113	1312	•	Yes	
	gij157817716	AP-3b1	0.883	0.088	0.883	0.971	0.795	8	3	335	126	•		
	gij198278523	AP-3d1	0.887	0.218	0.635	1.012	1.012	10	3	438	73	•		
	gij48976083	AP-3m1	1.001	N/A		1.001		3	1	752	28	•	Yes	
	gij18959246	AP-3m2	N/A	N/A		1.001		3	1	753	28	□	Yes	
	gij109472298	AP2 associated kinase 1	0.714	0.063	0.715	0.776	0.651	30	3	247	228	•	Yes	
	gij16758846	bridging integrator 1 (Bin1)	0.747	0.017		0.735	0.760	8	2	427	76	•		
	gij9506497	clathrin (Hc)	0.999	0.125	1.006	1.120	0.871	112	3	73	1954	•		
	gij14010873	clathrin (Lc)	1.053	N/A			1.053	7	1	336	125	•		
	gij16758324	clathrin assembly protein	0.866	0.129	0.964	0.915	0.720	20	3	248	222	•	Yes	
	gij18093102	dynamin 1	0.873	0.024	0.855	0.900	0.864	462	3	3	10365	•	Yes	
	gij6978771	dynamin 2	0.860	0.031	0.855	0.893	0.832	242	3	23	5054	•	Yes	
	gij19924077	dynamin 3	0.871	0.028	0.874	0.897	0.842	219	3	29	4435	•	Yes	
	gij14717392	SEC31 homolog A	0.888	N/A	0.888			6	1	743	28	•		
	gij13994177	SNAP 91	N/A	0.149	0.964	1.020	0.739	12	3	271	202	□		
	gij17865351	valosin-containing protein	0.750	0.043		0.780	0.720	5	2	509	58	•		
	gij13162341	ADP-ribosylation factor 2	0.900	0.124	0.905	1.021	0.773	14	3	236	249	•		
	Small GTPases and related proteins	gij13162343	ADP-ribosylation factor 4	N/A	0.121	0.905	1.030	0.788	12	3	237	245	□	
		gij13162345	ADP-ribosylation factor 6	0.846	0.053	0.905	0.831	0.803	19	3	178	426	•	
gij21489979		ADP-ribosylation factor GTPase activating protein 1	5.080	3.772	6.283	0.853	8.104	6	3	594	39	•		
gij157818451		ADP-ribosylation factor-like 8A	1.049	0.066	1.114	0.982	1.050	22	3	211	298	•	Yes	
gij66730258		ADP-ribosylation factor-like 8B	1.089	0.035	1.067	1.129	1.071	54	3	110	1335	•	Yes	
gij13027426		ADP-ribosylation-like factor 6 interacting protein 5	0.733	0.131	0.630	0.880	0.687	4	3	605	38	•		
gij56676322		GTPase (IMAP family member)	N/A	0.093	1.029	0.939	0.844	15	3	582	40	□		
gij157821185		RAB GTPase activating protein 1-like	N/A	0.200	0.717	1.000		18	2	593	39	□		
gij45433570		RAB1	1.116	0.037	1.112	1.081	1.154	151	3	47	3080	•	Yes	
gij61889071		RAB10	1.189	0.012	1.194	1.175	1.199	137	3	39	3556	•	Yes	
gij14249144		RAB11B	1.257	0.013	1.250	1.273	1.249	109	3	59	2640	•	Yes	
gij16758368		RAB14	1.207	0.039	1.184	1.252	1.185	95	3	65	2338	•	Yes	
gij38454238		RAB15	1.144	0.019	1.158	1.122	1.151	46	3	104	1375	•	Yes	
gij60223069		RAB18	0.788	0.211	0.553	0.962	0.849	6	3	788	26	•	Yes	
gij16758202		RAB27B	0.882	0.088	0.819	0.888	0.944	4	2	549	48	•	Yes	
gij13929006		RAB2A	1.182	0.070	1.207	1.103	1.235	124	3	40	3543	•	Yes	
gij83415090		RAB2B	1.148	0.076	1.137	1.078	1.229	86	3	50	3018	•	Yes	
gij61556789	RAB35	1.119	0.030	1.137	1.084	1.135	67	3	93	1471	•	Yes		



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	gij109462366	RAB39B	1.160	0.071	1.119	1.241	1.119	13	3	351	115	●	
	gij61098195	RAB3A	1.169	0.007	1.174	1.161	1.172	316	3	7	7499	●	Yes
	gij13592037	RAB3B	1.116	0.008	1.121	1.107	1.121	183	3	32	4301	●	Yes
	gij19424194	RAB3C	1.159	0.009	1.151	1.169	1.156	250	3	27	4621	●	Yes
	gij77404180	RAB4A	1.137	0.048	1.083	1.175	1.154	38	3	130	854	●	Yes
	gij8394136	RAB4B	1.056	0.078	1.034	0.992	1.143	41	3	128	898	●	Yes
	gij12083645	RAB5A	1.260	0.026	1.229	1.277	1.273	56	3	92	1492	●	Yes
	gij1121583768	RAB5B	1.263	0.026	1.234	1.284	1.273	54	3	106	1370	●	Yes
	gij157786692	RAB5C	N/A	N/A			1.254	2	1	555	46	▲	Yes
	gij213972608	RAB6A	1.162	0.046	1.151	1.212	1.122	52	3	137	800	●	Yes
	gij157817539	RAB6B	N/A	0.031	1.124	1.175	1.120	43	3	146	713	□	Yes
	gij13027392	RAB7A	1.134	0.070	1.113	1.213	1.077	46	3	114	1215	●	Yes
	gij23463313	RAB8B	1.111	0.036	1.134	1.069	1.130	84	3	70	2105	●	Yes
	gij157824109	RAB9B	0.899	0.099	1.007	0.877	0.812	5	3	709	31	●	Yes
	gij109509431	RAN binding protein 2	N/A	1.116	3.028	1.072	2.981	8	3	750	28	□	
	gij52138628	RAP1B, member of RAS oncogene family	1.086	0.155	1.196	1.196	0.977	9	2	493	61	●	Yes
	gij168823439	Rap2 interacting protein	N/A	0.111	0.615	0.771		2	2	608	38	▲	
	gij19173774	RAP2B	1.948	0.332	2.193	2.081	1.570	14	3	215	292	●	Yes
	gij109476659	RAS and EF hand domain containing	N/A	0.040	1.132	1.194	1.119	6	3	428	75	□	
	gij34858593	Ras association (RalGDS/AF-6)	N/A	0.108	1.107	1.160	0.952	5	3	655	35	□	
	gij11968136	ras homolog gene family, member B	0.954	N/A			0.954	4	1	529	52	●	Yes
	gij157820415	RAS protein activator like 1 (GAP1 like)	N/A	0.127	0.979	0.922	0.736	28	3	712	30	□	Yes
	gij13592039	ras related v-ral simian leukemia viral oncogene homolog A	1.047	0.130	0.898	1.117	1.127	26	3	205	328	●	Yes
	gij54607147	ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)	1.085	0.031	1.111	1.095	1.050	52	3	124	959	●	Yes
	gij109463007	Ras-related protein Rab-1B	1.111	0.025	1.112	1.086	1.136	138	3	55	2763	●	
<b>Trafficking and SV membrane proteins</b>	gij11560002	amphiphysin	0.818	0.065	0.881	0.823	0.751	12	3	539	50	●	
	gij30017417	ATP-binding cassette, A1	0.126	0.068	0.087	0.204	0.087	9	3	477	65	●	
	gij158187533	ATP-binding cassette, A13	1.006	0.027	1.025	1.017	0.976	15	3	406	88	●	
	gij18034785	ATP-binding cassette, B6	N/A	0.103	0.897	0.772	0.692	11	3	235	252	□	
	gij6978599	CAPS1 (Ca <sup>++</sup> -dependent secretion activator)	0.671	0.131		0.763	0.578	5	2	680	33	●	
	gij197384345	coatamer protein complex (COP) alpha	N/A	0.114	0.811	0.769	0.596	10	3	692	32	□	
	gij18158449	coatamer protein complex (COP) beta	N/A	0.121	0.906	0.914	1.120	10	3	779	26	□	
	gij77157795	MAL2	2.164	0.161	2.321	1.999	2.173	47	3	102	1382	●	Yes
	gij6981602	Munc18-1	1.144	0.110	1.201	1.214	1.017	131	3	42	3513	●	Yes
	gij13489067	NSF	1.189	0.012	1.176	1.195	1.197	216	3	30	4363	●	Yes
	gij16758732	reticulon 1	0.771	0.048	0.772	0.819	0.723	77	3	77	1903	●	Yes
	gij57977297	reticulon 3a	0.762	0.054	0.714	0.820	0.751	83	3	97	1406	●	
	gij13929188	reticulon 4	0.444	0.119	0.420	0.339	0.574	6	3	600	39	●	
	gij158749626	SCAMP1	0.991	0.042	0.949	1.032	0.993	74	3	75	1945	●	Yes
	gij109465077	SCAMP3	0.951	0.039	0.909	0.987	0.957	48	3	105	1372	●	Yes
	gij13929020	SCAMP5	1.336	0.014	1.349	1.321	1.339	37	3	148	682	●	Yes
	gij157817468	SNAP gamma	0.898	0.453	0.578		1.219	4	2	528	53	●	
	gij9507127	SNIP	1.005	0.029	1.033	0.975	1.007	18	3	338	124	●	Yes
	gij160707907	synapsin 1b	0.771	0.116	0.855	0.819	0.638	323	3	13	6636	●	Yes
	gij77404242	synapsin 2	0.766	0.076	0.826	0.791	0.681	321	3	8	7440	●	Yes
	gij8394389	synapsin 3	0.719	0.089	0.764	0.775	0.617	28	3	253	215	●	Yes
	gij9507167	synaptogyrin 1	1.513	0.026	1.518	1.486	1.537	80	3	66	2334	●	Yes
	gij157819371	synaptogyrin 3	0.946	0.093	0.838	0.995	1.005	60	3	78	1895	●	Yes
	gij209870039	synaptotjanin 1	0.708	0.175		0.832	0.585	13	2	330	130	●	
	gij6981622	synaptophysin	1.802	0.329	1.690	1.543	2.172	226	3	26	4655	●	Yes
	gij13027428	synaptoporin	1.399	0.135	1.329	1.312	1.555	58	3	150	662	●	Yes

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	gij148356226	synaptotagmin 1	1.801	0.201	1.808	1.597	1.999	632	3	1	16698	●	Yes
	gij20301966	synaptotagmin 12	1.918	0.119	2.011	1.783	1.960	88	3	68	2256	●	Yes
	gij109478281	synaptotagmin 16	N/A	0.094	0.905	0.989	1.093	8	3	699	31	□	
	gij20301992	synaptotagmin 17	1.743	0.203	1.509	1.847	1.873	17	3	384	99	●	Yes
	gij6981624	synaptotagmin 2	1.527	0.137	1.553	1.380	1.650	305	3	16	6310	●	Yes
	gij9507171	synaptotagmin 5	1.765	0.136	1.775	1.624	1.896	184	3	28	4489	●	Yes
	gij56605828	trafficking protein particle complex 3	0.884	0.069	0.886	0.953	0.815	22	3	258	214	●	Yes
	gij157819521	trafficking protein particle complex 5	0.853	0.010	0.863	0.844	0.853	18	3	230	261	●	Yes
	gij118142811	VAMP associated protein A	0.889	0.047	0.856	0.856	0.923	9	2	249	218	●	Yes
	gij11177880	VAMP associated protein B	0.776	0.336	0.539	0.539	1.013	3	2	536	51	●	Yes
	gij9507177	vesicle docking protein	N/A	0.033	0.999	1.011	1.062	9	3	489	63	□	
	gij157819455	VPS 13D	N/A	0.079	1.074		1.185	4	2	703	31	□	
	gij157786652	VPS 53	0.715	0.197	0.592	0.942	0.611	7	3	614	37	●	
	gij25742604	VPS45	N/A	N/A			2.367	2	1	352	113	▲	Yes
	gij12831221	Vti1a	1.518	0.452	2.007	1.114	1.435	5	3	415	81	●	Yes
Transporters	gij109462043	Aminophospholipid translocase VA	N/A	0.139	0.960	1.001	1.218	15	3	234	252	□	
	gij109500484	aminophospholipid transporter (APLT)	1.137	0.050	1.102	1.116	1.194	224	3	24	4985	●	Yes
	gij109502544	aminophospholipid transporter-like	1.138	0.145	1.069	1.041	1.304	19	3	218	288	●	Yes
	gij157821877	ATPase, 8B1	N/A	0.137	1.020	1.109	1.289	13	3	184	404	□	
	gij8392935	ATPase, Ca++ transporting (SERCA2a)	0.758	0.066	0.728	0.834	0.712	29	3	169	467	●	Yes
	gij6978547	ATPase, Na+/K+ transporting, a3	0.850	0.033	0.814	0.879	0.857	177	3	33	4014	●	Yes
	gij12408294	ATPase, Na+/K+ transporting, a4	0.913	0.036	0.871	0.937	0.929	65	3	141	793	●	Yes
	gij148298669	CIC3	0.834	0.079	0.779	0.798	0.924	18	3	210	302	●	
	gij13928770	CLC7	N/A	0.035	0.868	0.819		3	2	613	37	□	
	gij148747140	GLUT-3	2.443	0.545	2.189	2.071	3.069	79	3	82	1755	●	Yes
	gij19424160	H+/K+ ATPase 12A	N/A	0.034	0.871	0.940	0.907	65	3	142	787	□	Yes
	gij62639372	H+/K+ ATPase alpha	N/A	0.023	0.855	0.896	0.895	58	3	134	807	□	Yes
	gij78214331	Na/Ca exchanger 1 (Slc8a,1)	2.004	0.626	1.561	1.561	2.446	4	2	527	53	●	
	gij17530967	Na/Ca exchanger 2 (Slc8a,2)	1.947	0.225	1.820	1.814	2.207	40	3	138	798	●	
	gij17530969	Na/Ca exchanger 3 (Slc8a,3)	N/A	N/A			2.446	3	1	599	39	□	
	gij6978543	Na+/K+ ATPase, a1	0.934	0.044	0.885	0.972	0.945	168	3	36	3720	●	Yes
	gij6978545	Na+/K+ ATPase, a2	0.904	0.033	0.866	0.926	0.918	139	3	44	3253	●	Yes
	gij148747253	Na+/K+ ATPase, b1	0.827	0.110	0.884	0.897	0.699	32	3	191	384	●	Yes
	gij74271849	NTT4	1.413	0.045	1.407	1.371	1.461	115	3	61	2497	●	Yes
	gij27229292	NTT74 (Slc6,15)	N/A	0.081	1.452	1.510	1.350	6	3	337	125	□	
	gij109486878	potassium voltage-gated channel (Q5)	N/A	2.511	6.283		9.834	3	2	595	39	□	Yes
	gij132814551	proline transporter	1.300	0.192	1.169	1.209	1.521	32	3	179	423	●	Yes
	gij109504917	Slc17a4 (Na+ dependent phosphate transporter)	N/A	1.485	4.498	3.398	6.337	25	3	385	99	□	
	gij157786986	Slc35f5 (putative solute transporter)	0.083	0.016	0.085	0.065	0.097	49	3	198	358	●	
	gij62667458	Slc9,6 (sodium/hydrogen exchanger)	1.067	0.066	0.994	1.121	1.085	10	3	287	184	●	
	gij148747227	SV2a	0.835	0.016	0.817	0.843	0.847	518	3	4	9941	●	Yes
	gij17105360	SV2b	4.678	0.944	4.486	3.844	5.703	354	3	14	6634	●	Yes
	gij13928804	SV2c	0.292	0.035	0.279	0.266	0.331	19	3	212	296	●	Yes
	gij109497812	SV31	2.021	0.195	1.848	2.232	1.982	58	3	112	1316	●	Yes
	gij13929110	V-ATPase acc subunit (Ac45)	0.865	0.179	0.679	0.880	1.036	79	3	139	796	●	Yes
	gij77627990	V-ATPase V0-A1	1.206	0.043	1.178	1.185	1.256	705	3	2	14074	●	Yes
	gij109497314	V-ATPase V0-A2	N/A	0.208	0.948	0.994	1.329	29	3	125	954	□	Yes
	gij18677757	V-ATPase V0-C	0.963	0.086	0.977	1.040	0.870	18	3	226	269	●	Yes
	gij58865424	V-ATPase V0-D1	1.257	0.054	1.254	1.204	1.312	298	3	17	6173	●	Yes
	gij109493234	V-ATPase V1-A1	1.097	0.087	1.160	1.133	0.999	320	3	6	7566	●	Yes
	gij17105370	V-ATPase V1-B2	1.041	0.124	1.148	1.069	0.905	275	3	12	6653	●	Yes
	gij58865560	V-ATPase V1-C1	1.191	0.085	1.238	1.243	1.093	115	3	64	2346	●	Yes
	gij40786463	V-ATPase V1-D	0.985	0.086	1.030	1.040	0.886	151	3	31	4332	●	Yes
	gij38454230	V-ATPase V1-E1	1.244	0.106	1.363	1.209	1.159	150	3	35	3730	●	Yes
	gij16758754	V-ATPase V1-F	0.950	0.066	0.998	0.976	0.874	40	3	155	613	●	Yes
	gij47059104	V-ATPase V1-G2	1.252	0.078	1.242	1.179	1.335	28	3	159	564	●	Yes

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	gij62078587	V-ATPase V1-H	1.065	0.154	1.174	1.133	0.889	59	3	99	1400	●	Yes
	gij13929106	VGAT	0.132	0.025	0.108	0.158	0.129	167	3	22	5082	●	Yes
	gij16758726	VGLUT-1	5.496	1.057	5.439	4.470	6.581	172	3	25	4810	●	Yes
	gij16758166	VGLUT-2	0.991	0.063	0.937	1.060	0.977	31	3	171	451	●	Yes
	gij8394242	voltage gated Na+ channel 10a	N/A	0.054	0.967	1.029	0.921	9	3	498	61	□	
	gij6981506	voltage gated Na+ channel 2a1	N/A	0.054	0.967	1.029	0.921	9	3	495	61	□	
	gij6981510	voltage gated Na+ channel 3a	N/A	0.054	0.967	1.029	0.921	9	3	496	61	□	
	gij6981514	voltage-gated sodium channel type V alpha	N/A	0.054	0.967	1.029	0.921	9	3	497	61	□	
	gij61557417	ZnT-3	2.460	0.063	2.399	2.456	2.524	89	3	67	2294	●	Yes
Cytoskeleton	gij157786968	abnormal spindle homolog	0.714	0.041	0.758	0.704	0.679	15	3	636	36	●	
	gij157818697	actin binding protein 1C	0.867	N/A			0.867	3	1	554	47	●	
	gij13592137	actin related protein 2/3 complex, subunit 1A	0.648	0.074		0.701	0.595	4	2	429	75	●	Yes
	gij157786926	actin related protein 2/3 complex, subunit 3	0.710	N/A		0.710		4	1	706	31	●	Yes
	gij109486016	actin related protein 2/3 complex, subunit 5-	0.740	0.140	0.641	0.839		4	2	698	31	●	Yes
	gij157822087	actin related protein M1	N/A	0.157	0.775	0.997		3	2	679	33		
	gij13592133	actin, beta	0.894	0.092	0.933	0.960	0.790	302	3	15	6417	●	Yes
	gij31543764	alpha-spectrin 2	0.617	0.041	0.573	0.623	0.654	4	3	430	74	●	
	gij109467596	ankyrin 2 isoform 1	N/A	0.561	1.320		0.527	2	2	722	30	▲	
	gij109465474	ankyrin 2 isoform 2	N/A	0.561	1.320		0.527	2	2	723	30	□▲	
	gij109459980	ankyrin repeat domain 15	N/A	0.135	1.017	1.016	0.783	9	3	813	25	□	
	gij76096340	ankyrin repeat domain 16	N/A	0.040	0.635	0.623	0.560	11	3	751	28	□	
	gij109472548	ankyrin repeat domain 26	N/A	0.132		1.206	1.019	2		653	35	□▲	
	gij16758606	Arg/Abl-interacting protein ArgBP2	N/A	1.532	4.715	4.528	7.271	16	3	648	35	□	
	gij157823689	ARP1 actin-related protein 1 homolog A, centractin alpha	0.865	0.105	0.866	0.970	0.759	116	3	87	1611	●	
	gij166157502	ARP1 actin-related protein 1 homolog B	0.914	0.155	0.893	1.079	0.771	64	3	120	1058	●	
	gij57164143	ARP2 actin-related protein 2 homolog	0.840	0.121	0.864	0.948	0.710	55	3	177	426	●	Yes
	gij16758540	CLIP associating protein 2	N/A	0.135	1.017	1.016	0.783	9	3	812	25	□	
	gij8393101	cofilin 1	0.570	0.202	0.712	0.427	0.712	4	2	717	30	●	
	gij34330155	doublecortin	0.910	0.058	0.897	0.973	0.860	3	3	654	35	●	
	gij167830444	doublecortin domain containing 2	N/A	0.048	0.792	0.876	0.792	32	3	587	40	□	
	gij13162302	dynactin 1	0.809	0.096	0.862	0.866	0.698	16	3	339	124	●	Yes
	gij148491097	dynein 1 (Hc1)	1.036	0.046	1.059	1.067	0.983	399	3	18	5396	●	Yes
	gij11276091	dynein 1 lc1	0.978	0.038	0.968	1.020	0.947	6	3	519	55	●	Yes
	gij16758748	dynein 1 lc2	1.035	0.095		1.102	0.968	5	2	591	39	●	Yes
	gij21955134	dynein 1 Lic1	0.825	0.262	0.707	1.125	0.643	8	3	350	115	●	
	gij12711694	dynein 2 Hc1	0.998	0.041	0.999	0.957	1.038	12	3	611	37	●	Yes
	gij109478809	dynein Hc11	N/A	0.049	1.156	1.253	1.217	16	3	572	42	□	
	gij109473703	dynein Hc16F	N/A	0.127	1.152	0.984	0.903	11	3	790	26	□	
	gij109472192	dynein Hc16F	N/A	N/A		1.083		3	1	791	26	□	
	gij109462780	dynein Hc3	N/A	0.195	1.013	1.133	0.751	9	3	818	25	□	
	gij62643120	dynein Hc5	N/A	0.124	0.860	0.954	0.708	48	3	644	35	□	
	gij109509251	dynein Hc8	N/A	0.124	0.860	0.954	0.708	48	3	643	35	□	
	gij109497311	dynein Hc89D	N/A	0.060	0.961	0.851	0.865	14	3	704	31	□	
	gij109495859	dynein Hc89D	N/A	0.060	0.961	0.851	0.865	14	3	705	31	□	
	gij18093106	dynein LcLC8-2	0.933	0.030	0.935	0.961	0.902	13	3	256	215	●	
	gij16758016	dynein Lp	0.947	0.014	0.963	0.941	0.938	15	3	448	71	●	
	gij157817181	dystonin	0.999	0.099	0.984	0.908	1.105	22	3	297	169	●	
	gij9506811	internexin neuronal intermediate filament protein, alpha	0.962	0.129	1.028	1.044	0.814	81	3	81	1809	●	Yes
	gij157821065	kinesin family member 21A	0.786	0.119	0.810	0.892	0.657	20	3	348	117	●	Yes
	gij145699112	kinesin family member 2C	N/A	N/A		0.832		2	1	748	28	□	
	gij157819777	kinesin family member 5C	0.692	0.103		0.765	0.619	5	1	511	57	●	Yes

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	gij13591886	microtubule-associated protein 1A	0.525	0.051	0.561		0.489	6	2	515	56	●	Yes
	gij158749620	microtubule-associated protein 1B	0.799	0.217		0.952	0.645	3	2	544	49	●	
	gij8850229	microtubule-associated protein 6	0.798	0.090	0.767	0.728	0.900	13	3	222	275	●	Yes
	gij158303318	microtubule-associated protein tau	0.728	0.055		0.767	0.688	4	2	760	27	●	
	gij109503558	myomesin 2	N/A	N/A	0.904			2	1	747	28	□ ▲	
	gij13928704	myosin 10	0.779	0.148	0.738	0.942	0.656	18	3	223	272	●	Yes
	gij109480435	myosin binding protein C, slow type	1.090	0.022	1.083	1.073	1.115	9	3	625	36	●	
	gij8393807	myosin Hc 7b	N/A	0.097	1.168	1.285	1.360	5	3	775	26	□	
	gij6981236	myosin Hc9	N/A	0.223	0.605	0.995	0.988	4	3	631	36	□	
	gij109505313	myosin IIIA	N/A	N/A			0.781	5	1	624	36	□	
	gij119705443	myosin IXA	N/A	0.044	1.189	1.106	1.171	36	3	267	204	□	
	gij11559935	myosin Va	0.900	0.051	0.874	0.959	0.867	137	3	79	1814	●	Yes
	gij8393817	myosin Vb	1.006	0.098	1.108	0.913	0.998	14	3	216	290	□	
	gij109506410	myosin VIIb	0.744	0.195	0.561	0.723	0.950	11	3	411	85	●	Yes
	gij13540714	plectin 1	0.954	0.083	1.046	0.886	0.929	68	3	156	584	●	
	gij109497264	septin 10 isoform 1	N/A	0.073	0.884	0.865	0.750	14	3	167	467	□	
	gij157821523	septin 11	0.840	0.081	0.905	0.867	0.750	24	3	153	634	●	
	gij9507085	septin 3	0.805	0.128	0.867	0.891	0.658	67	3	129	857	●	
	gij58865356	septin 4	0.941	0.018	0.947	0.956	0.921	33	3	181	410	●	
	gij90577179	septin 5	0.984	0.051	0.961	1.042	0.949	150	3	46	3168	●	
	gij166091429	septin 7 isoform a	0.847	0.113	0.914	0.910	0.716	90	3	80	1813	●	Yes
	gij157819689	septin 8	N/A	0.073	0.884	0.865	0.750	14	3	168	467	□	
	gij164698508	septin 9 isoform 2	0.831	0.121	0.806	0.963	0.726	28	3	231	255	●	
	gij109512512	Septin-6	0.840	0.081	0.905	0.867	0.750	24	3	154	614	●	
	gij9507135	spectrin, beta, non-erythrocytic 2	0.655	0.129	0.580	0.804	0.581	14	3	355	113	●	Yes
	gij157823715	tubulin polymerization promoting protein	0.718	0.052	0.692	0.778	0.685	28	3	149	663	●	
	gij11560133	tubulin, alpha 1a	1.047	0.035	1.070	1.007	1.065	133	3	48	3064	●	Yes
	gij112984124	tubulin, alpha 1b	1.047	0.035	1.070	1.007	1.065	133	3	49	3034	●	Yes
	gij55741524	tubulin, alpha 4a	1.052	0.018	1.035	1.050	1.071	115	3	62	2406	●	Yes
	gij66730465	tubulin, alpha 8	N/A	0.020	1.086	1.104	1.127	62	3	115	1214	□	
	gij110347600	tubulin, beta 2b	1.047	0.013	1.055	1.054	1.033	131	3	60	2547	●	Yes
	gij40018568	tubulin, beta 2c	1.045	0.021	1.052	1.062	1.021	123	3	51	3004	●	Yes
	gij145966774	tubulin, beta 3	1.078	0.019	1.059	1.078	1.097	75	3	83	1752	●	Yes
	gij158262004	tubulin, beta 4	1.037	0.034	1.052	1.062	0.999	124	3	52	2980	●	Yes
	gij27465535	tubulin, beta 5	1.049	0.015	1.052	1.062	1.033	132	3	45	3225	●	Yes
	gij109491903	tubulin, gamma 2	N/A	0.132	0.933	0.843	1.103	5	3	560	45	□	
	gij157820617	tubulin, gamma complex associated protein 2	0.750	0.149	0.856		0.645	6	2	619	37	●	
<b>Cell surface</b>	gij27436861	amyloid beta, A4	0.859	0.188	1.072	0.712	0.793	3	3	744	28	●	
	gij16923964	contactin 1	0.894	0.053	0.942	0.838	0.904	15	3	332	127	●	Yes
	gij11067409	neuronal growth regulator 1	1.082	0.025	1.100	1.064		7	2	463	68	●	Yes
	gij109481693	pheromone receptor (EC1-V2R)	0.994	0.291	1.164	1.160	0.658	16	3	458	70	●	
	gij13591880	proteolipid protein 1	0.931	0.109	0.869	1.057	0.868	22	3	140	794	●	Yes
	gij40789241	protocadherin alpha 3	N/A	0.029	1.065	1.008	1.025	5	3	576	42	□	
	gij109461600	ryanodine receptor 1	N/A	0.124	0.864	0.954	0.708	49	3	642	35	□	
	gij8393469	sphingosine-1-phosphate receptor 2	N/A	0.046	0.799	0.876	0.792	35	3	187	397	□	
	gij6981654	Thy-1 cell surface antigen	0.919	0.066	0.901	0.992	0.864	68	3	119	1064	●	Yes
	gij109478654	thyroid hormone receptor interactor 11	N/A	0.097	1.160	1.144	0.984	21	3	821	25	□	
	gij37693512	toll-like receptor 9	1.496	0.602		1.071	1.922	4	2	670	34	●	
<b>Signaling molecules</b>	gij57977323	2,3 cyclic nucleotide 3 phosphodiesterase	0.843	0.072	0.889	0.880	0.760	78	3	121	1028	●	Yes
	gij198386328	A kinase (PRKA) anchor protein 13	N/A	0.101	1.210	1.403	1.357	4	3	824	25	□	
	gij62078621	A kinase (PRKA) anchor protein 8-like	N/A	0.231	1.071	1.397		5	2	804	25	□	
	gij59709467	adenylate cyclase-associated protein 1	0.985	0.638		0.534	1.437	4	2	521	54	●	
	gij51948420	B-cell receptor-associated protein 31	0.822	0.114	0.711	0.815	0.939	4	3	769	27	●	Yes
	gij61557021	bifunctional apoptosis regulator	N/A	0.074	0.676	0.805	0.805	10	3	424	77	□	
	gij109459630	brain-selective kinase 2a	N/A	0.033	0.999	1.011	1.062	9	3	483	63	□	

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	gij13928732	Brca2	0.886	0.035	0.861	0.911		7	2	453	70	•	
	gij6978591	calmodulin 3	0.918	N/A			0.918	3	1	562	44	•	
	gij109467903	calmodulin regulated spectrin-associated protein 1		0.076	1.059	1.204	1.170	14	3	656	35	□	
	gij13027458	CaM kinase-like vesicle-associated	1.050	0.016	1.034	1.066	1.050	6	3	686	32	•	
	gij6978593	CaMKIIa	1.082	0.028	1.076	1.113	1.058	336	3	9	7158	•	Yes
	gij108796657	CaMKIIb2	1.120	0.057	1.086	1.089	1.185	191	3	56	2729	•	Yes
	gij6978595	CaMKIId	1.156	0.071	1.138	1.096	1.234	175	3	54	2770	•	Yes
	gij19424316	CaMKIIg	1.112	0.043	1.086	1.089	1.162	141	3	103	1376	•	Yes
	gij157817807	casein kinase 2a	0.810	0.047	0.824	0.849	0.758	28	3	229	267	•	Yes
	gij9506469	Cd47	1.491	0.043	1.442	1.514	1.518	10	3	196	370	•	
	gij6978635	CD59 molecule	N/A	0.038	0.623	0.699	0.648	10	3	639	36	□	
	gij16758290	CDC5-like	N/A	0.125	1.704		1.881	2	2	809	25	□ ▲	
	gij109475021	CDK5 associated protein 2	N/A	0.026	0.158	0.201	0.204	13	3	727	29	□	
	gij25742751	collapsin response mediator protein 1	0.775	0.113	0.865	0.813	0.648	43	3	131	847	•	Yes
	gij56606098	complement component 1	3.771	0.602	4.189	3.081	4.044	8	3	392	94	•	
	gij47575877	complement component 2	0.854	0.287	0.836	1.149	0.577	5	3	641	35	•	
	gij158138561	complement component 3	0.664	0.124	0.522	0.724	0.746	106	3	89	1532	•	
	gij218156285	complement factor B	1.079	0.026	1.107	1.077	1.054	30	3	257	214	•	
	gij51948518	COP9 signalosome subunit 4	N/A	0.033	0.999	1.011	1.062	9	3	487	63	□	
	gij109485944	cyclin M4	N/A	0.004	1.014		1.008	6	2	434	73	□	
	gij157823255	DIRAS family, GTP-binding RAS-like 1	1.163	0.132	1.097	1.315	1.077	22	3	197	366	•	
	gij12248181	glutamate receptor 2d (GluR-2d)	N/A	0.104	0.734	0.923	0.751	6	3	819	25	□	
	gij157787062	glutamate receptor 2d (GluR-2d) interacting protein		0.231	1.071	1.397		5	2	803	25	□	
	gij157787064	glutamate receptor 2-metabotropic (mGluR-2)	0.963	0.117	1.046	0.881		5	2	445	71	•	
	gij155369743	glycine receptor 3a	N/A	N/A		1.085		2	1	710	30	□ ▲	
	gij8393415	growth associated protein 43	0.980	0.090	0.878	1.017	1.045	21	3	163	490	•	Yes
	gij8394152	GTP-binding protein alpha o	0.998	0.070	0.921	1.017	1.057	69	3	127	919	•	Yes
	gij61557003	guanine nucleotide binding protein a13	N/A	0.131	0.951	0.966	1.185	7	3	269	204	□	Yes
	gij148747524	guanine nucleotide binding protein b1	0.900	0.054	0.947	0.911	0.841	84	3	74	1946	•	Yes
	gij29789261	guanine nucleotide binding protein b2	0.897	0.061	0.953	0.906	0.832	87	3	85	1640	•	Yes
	gij109459840	guanine nucleotide binding protein g3	1.155	0.061	1.196	1.086	1.183	11	3	334	126	•	
	gij13162316	guanine nucleotide binding protein g7	0.510	0.036	0.468	0.525	0.535	16	3	501	60	•	
	gij109483662	guanine nucleotide exchange factor p532	N/A	0.120	0.933		1.103	3	2	584	40	□	
	gij8393864	hippocalcin-like 1	0.949	0.100	0.991	1.021	0.835	18	3	213	295	•	
	gij189339236	huntingtin	N/A	0.078		0.696	0.806	2	2	671	34	▲	
	gij47059017	hyaluronan mediated motility receptor	N/A	0.034	0.971	1.019		3	2	628	36	□	
	gij109483750	inhibitor of Brutons tyrosine kinase	N/A	N/A		1.922		3	1	716	30	□	
	gij55925610	inositol 1,4,5-triphosphate receptor, type 1	0.938	0.078	0.941	1.014	0.859	10	3	609	38	•	Yes
	gij6981110	inositol 1,4,5-triphosphate receptor, type 3	N/A	0.051	0.828	0.900		14	2	660	35	□	
	gij6981096	interleukin 1 receptor accessory protein	N/A	0.150	0.782	0.837	1.064	16	3	320	142	□	
	gij16758692	interleukin 2	0.721	0.077	0.775		0.666	5	2	800	25	•	
	gij76559915	janus kinase and microtubule interacting protein 1	N/A	0.076	1.184	1.160	1.303	13	3	565	44	□	
	gij157821595	ligase activator of NFKB 1	N/A	0.140	0.854	0.844	0.606	55	3	294	177	□	
	gij25742796	limbic system-associated membrane protein	0.898	0.129	1.025	0.767	0.902	10	3	298	168	•	Yes
	gij16758360	MAP-kinase activating death domain	1.217	0.152	1.048	1.344	1.258	13	3	224	272	•	
	gij8394233	mitogen activated protein kinase 9	N/A	0.083		1.072	0.954	3	2	764	27	•	
	gij157819841	mitogen activated protein kinase binding protein 1	N/A	0.114	0.811	0.769	0.596	10	3	696	32	□	
	gij55741477	muscle RAS oncogene homolog	0.980	0.313	1.293	0.981	0.667	6	3	418	79	•	Yes

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	gij109505717	Myosin light chain kinase 2	1.013	0.083		1.072	0.954	3	2	763	27	●	
	gij13928706	neural cell adhesion molecule 1 (NCAM1)	0.805	0.042	0.851	0.798	0.768	18	3	306	160	●	Yes
	gij168823431	neurexin 3	0.617	0.270		0.808	0.426	3	2	673	33	●	
	gij66730547	neurocalcin delta	0.911	0.134	0.945	1.026	0.764	29	3	180	423	●	
	gij158341642	neurofilament, heavy polypeptide	N/A	0.021		0.986	1.016	6	2	300	165	□	Yes
	gij13929098	neurofilament, light polypeptide	0.890	0.042	0.903	0.923	0.843	50	3	147	694	●	Yes
	gij8393823	neurofilament, medium polypeptide	0.935	0.058	0.945	0.986	0.873	28	3	166	474	●	Yes
	gij19173782	neuronal calcium-binding protein 2	N/A	N/A			0.592	2	1	669	34	▲	
	gij109486321	neuronal guanine nucleotide exchange factor	N/A	N/A			0.644	2	1	651	35	▲	
	gij24308510	neuronal pentraxin 1	1.508	0.404	1.974	1.274	1.275	15	3	281	192	●	Yes
	gij36054040	neuronal pentraxin receptor	1.916	0.522	1.328	2.325	2.096	7	3	443	71	●	
	gij9507073	neuroplastin	0.929	0.021	0.910	0.951	0.926	13	3	328	131	●	Yes
	gij8394196	neurotrimin	1.047	0.102	0.990	1.165	0.987	5	3	503	60	●	Yes
	gij47575933	olfactory receptor Olr93	0.903	0.071	0.918	0.965	0.825	40	3	329	130	●	
	gij13592033	parathyroid hormone 2 receptor	N/A	N/A			1.370	2	1	816	25	□ ▲	
	gij11693144	phosphodiesterase 4D interacting protein	N/A	0.222	0.158	0.564	0.206	16	3	296	172	□	
	gij109485862	polyubiquitin	N/A	N/A		0.751		4	1	563	44	□	
	gij11120720	progesterone receptor membrane component 1	0.768	0.039	0.811	0.755	0.737	13	3	265	206	●	Yes
	gij8393896	protein kinase C and casein kinase substrate in neurons 1	N/A	0.038	0.999	1.068	1.062	10	3	486	63	□	
	gij157786690	protein kinase C, alpha	N/A	0.099	0.766	0.913	0.955	10	3	293	180	□	Yes
	gij76880457	protein kinase C, beta	0.915	0.130	0.786	0.913	1.046	21	3	194	374	●	Yes
	gij6981400	protein kinase C, gamma	N/A	N/A			0.982	2	1	583	40	▲	Yes
	gij6981388	protein phosphatase 1, beta	N/A	N/A			0.808	2	1	575	42	▲	
	gij8394033	protein phosphatase 3 beta	N/A	0.171	0.838	0.810	0.528	12	3	400	89	□	
	gij8394030	protein phosphatase 3, alpha	0.799	0.127	0.902	0.838	0.658	48	3	252	217	●	
	gij109458729	Protein tyrosine phosphatase receptor-F IPa3	N/A	0.027	1.019	1.011	1.062	10	3	484	63	□	
	gij61556770	protein tyrosine phosphatase, non-receptor type 9	1.011	0.038	0.969	1.023	1.042	50	3	143	760	●	Yes
	gij13928818	protein tyrosine phosphatase, receptor type, N2	0.588	0.029	0.571	0.572	0.622	25	3	164	483	●	Yes
	gij109469721	Proto-oncogene tyrosine-protein kinase ABL1	N/A	0.421	3.028	2.320	3.069	5	3	682	33	□	
	gij109475770	regulatory solute carrier protein, family 1, member 1	N/A	0.063	0.984	1.007	0.888	17	3	700	31	□	
	gij211065497	Rho GTPase activating protein 1	1.190	0.037	1.175	1.233	1.164	30	3	195	371	●	Yes
	gij47155567	Rho GTPase activating protein 20	N/A	0.086	0.790	0.761	0.922	12	3	363	109	□	
	gij109488905	Rho GTPase activating protein 21	0.874	0.171	0.998	0.945	0.680	18	3	601	39	●	
	gij6981478	Rho-associated coiled-coil containing protein kinase 2	N/A	0.656	1.704	0.776		2	2	808	25	□ ▲	
	gij109475069	SH3-domain GRB2-like 2	0.763	0.050	0.798	0.728		5	2	559	45	●	
	gij58865428	SH3-domain GRB2-like B1	0.886	0.126	0.997	0.914	0.749	6	3	615	37	●	
	gij109459108	signal peptidase complex subunit 2 homolog	0.954	0.235		0.788	1.120	7	2	630	36	●	
	gij51854241	signal-induced proliferation-associated 1	N/A	N/A	0.083			2	1	627	36	□ ▲	
<b>Metabolic enzymes</b>	gij9506969	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4	N/A	2.511	6.283		9.834	3	2	597	39	□	
	gij66730294	abhydrolase domain containing 12	0.746	0.056	0.706		0.786	5	2	798	26	●	
	gij18543341	acyl-CoA synthetase long-chain family member 6	0.721	0.010	0.728		0.714	4	2	380	101	●	

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	gij158081751	aldolase B	N/A	0.179	0.917	0.874	0.588	12	3	263	208	□	
	gij21489983	asparaginase like 1	N/A	0.058	0.848	0.929		8	2	617	37	□	
	gij158187544	brain glycogen phosphorylase	0.928	0.121	0.861	1.067	0.855	62	3	100	1399	●	Yes
	gij11693172	calreticulin	0.804	0.049	0.812	0.850	0.752	10	3	275	195	●	
	gij157819451	carbohydrate sulfotransferase 8	N/A	0.050	0.595	0.681	0.593	10	3	313	152	□	
	gij9506467	carbonyl reductase 1	1.013	0.114	0.883	1.060	1.095	10	3	319	145	●	
	gij14010893	carnitine O-octanoyltransferase	N/A	0.105	1.133	0.981	0.933	15	3	386	97	□	
	gij62079183	chaperonin containing TCP1, 6Bz	N/A	0.115	1.041	0.921	0.810	27	3	238	243	□	
	gij157819651	chaperonin containing TCP1, 7e	1.027	0.052	1.019	1.083	0.979	92	3	116	1137	●	Yes
	gij71795662	coactivator-associated arginine methyltransferase 1a	N/A	0.048	1.381	1.449		2	2	817	25	▲	
	gij158186659	cystathionine beta synthase	N/A	0.046		0.164	0.098	2	2	634	36	▲	
	gij157820071	diacylglycerol lipase, beta	N/A	N/A	0.229			2	1	538	50	□▲	
	gij157786744	dihydropyrimidinase-like 2	0.766	0.131	0.874	0.804	0.620	81	3	108	1366	●	Yes
	gij158186661	dihydropyrimidinase-like 4	0.751	0.074	0.822	0.757	0.674	11	3	409	87	●	Yes
	gij12711692	dihydropyrimidinase-like 5	0.699	N/A			0.699	3	1	787	26	●	
	gij58865978	dipeptidylpeptidase 10	1.082	0.213	1.049	1.309	0.887	12	3	299	168	●	Yes
	gij12408298	dipeptidylpeptidase 6	1.271	0.293	1.184	1.598	1.031	8	3	349	116	●	
	gij8393322	disulfide-isomerase A3	0.679	0.028	0.678	0.707	0.650	21	3	268	204	●	Yes
	gij13540638	endoplasmic reticulum aminopeptidase 1	N/A	0.056	1.122	1.045	1.012	10	3	772	27	□	
	gij8394158	fatty acid synthase	0.898	0.121	0.796	1.031	0.866	31	3	165	482	●	Yes
	gij6978487	fructose-bisphosphate aldolase A	0.776	0.118	0.864	0.821	0.642	102	3	71	2022	●	Yes
	gij6978489	fructose-bisphosphate aldolase C	0.812	0.134	0.910	0.868	0.659	37	3	158	579	●	
	gij8393418	GAPDH	0.964	0.027	0.980	0.980	0.933	348	3	11	6963	●	Yes
	gij58865546	glucosamine (N-acetyl)-6-sulfatase	N/A	0.073	0.948		0.845	11	2	481	64	□	
	gij46485440	glucose phosphate isomerase	0.994	0.061	0.982	1.061	0.940	21	3	346	117	●	
	gij8393406	glutamate decarboxylase 1	0.616	0.042	0.595	0.665	0.588	15	3	220	280	●	
	gij6978871	glutamate decarboxylase 2	0.676	0.044	0.689	0.712	0.626	32	3	203	336	●	Yes
	gij6980956	glutamate dehydrogenase 1	1.088	0.092	1.044	1.026	1.194	38	3	200	352	●	Yes
	gij6980972	glutamate oxaloacetate transaminase 2	0.544	0.451	0.225			12	2	285	187	●	Yes
	gij20302004	glutaminase 2 (liver, mitochondrial)	N/A	0.102	0.904	1.060	1.095	7	3	574	42	□	
	gij142349612	glutamine synthetase 1	0.828	0.023	0.848	0.803	0.833	43	3	145	715	●	Yes
	gij90903249	glutathione peroxidase 4A	0.814	0.164	0.931		0.698	5	2	389	96	●	
	gij90903229	glutathione peroxidase 4B	N/A	0.164	0.931		0.698	5	2	390	96	□	
	gij109471574	glycerol-3-phosphate dehydrogenase 1-like	0.889	0.054	0.951	0.851	0.865	15	3	589	40	●	
	gij40018582	glycosyltransferase-like 1B	2.075	0.303	1.728	2.207	2.290	9	3	347	117	●	
	gij6981022	hexokinase 1	0.826	0.109	0.817	0.940	0.723	12	3	254	215	●	Yes
	gij14091775	hydroxyacid oxidase 3	0.683	0.231		0.846	0.519	5	2	416	80	●	
	gij62079055	isocitrate dehydrogenase 2	1.034	0.069		0.985	1.083	5	2	324	136	●	
	gij157819887	lactamase, beta	0.088	0.007	0.095	0.081	0.089	12	3	245	229	●	
	gij8393706	L-lactate dehydrogenase A	0.958	0.082	0.983	1.024	0.866	69	3	88	1571	●	Yes
	gij6981146	L-lactate dehydrogenase B	1.003	0.065	1.000	1.070	0.940	53	3	123	981	●	
	gij42476181	malate dehydrogenase	0.804	0.179	0.918	0.897	0.598	25	3	274	195	●	
	gij157816881	methyltransferase 6	N/A	0.075	1.290	1.387	1.439	8	3	825	25	□	
	gij19923092	monoglyceride lipase	1.010	0.024	1.027		0.993	10	2	278	193	●	
	gij158138498	muscle glycogen phosphorylase	N/A	0.112	0.889	1.013	0.788	22	3	207	318	□	Yes
	gij8394009	peptidylprolyl isomerase A (cyclophilin A)	0.754	0.077	0.787	0.809	0.666	43	3	132	819	●	
	gij11968126	peptidylprolyl isomerase B	0.724	N/A	0.724			5	1	368	107	●	Yes
	gij62655561	peptidylprolyl isomerase D	N/A	0.071	0.723	0.807	0.666	7	3	422	78	□	
	gij86477155	period homolog 1	N/A	0.117	1.056	1.181	0.947	8	3	550	48	□	
	gij16923958	peroxiredoxin 1	0.708	0.140	0.852	0.699	0.573	3	3	450	71	●	
	gij8394432	peroxiredoxin 2	0.721	0.195	0.877	0.782	0.502	9	3	259	212	●	
	gij16758274	peroxiredoxin 4	0.545	0.407	0.852	0.699	0.083	3	3	522	54	●	
	gij51948478	phenylalanyl-tRNA synthetase, beta	0.917	0.090		0.980	0.853	4	2	423	78	●	

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	gij16758554	phosphatidylinositol 4-kinase 2 alpha	0.929	0.097	0.837	0.919	1.030	16	3	273	196	●	Yes
	gij13489075	phosphodiesterase 10A	N/A	0.175	0.521	0.703	0.871	11	3	377	104	□	
	gij13592021	phosphodiesterase 2A	N/A	0.037	0.930		0.982	2	2	765	27	▲	
	gij157817494	phosphodiesterase 6A	N/A	0.134	0.469	0.670	0.724	6	3	726	29	□	
	gij40538865	phosphodiesterase 8B	0.361	N/A	0.361			4	1	464	68	●	
	gij6981352	phosphofructokinase, liver	1.030	0.043	1.066	0.982	1.043	132	3	53	2862	●	Yes
	gij13929002	phosphofructokinase, muscle	1.021	0.026	1.032	0.991	1.040	209	3	20	5230	●	Yes
	gij57977273	phosphofructokinase, platelet	1.144	0.042	1.132	1.109	1.190	182	3	37	3669	●	Yes
	gij19705535	phosphofurin acidic cluster sorting protein 1	N/A	N/A			0.761	2	1	665	34	▲	
	gij40254752	phosphoglycerate kinase 1	N/A	N/A		0.832		2	1	491	62	▲	
	gij58865830	phosphoglycerate kinase 2	N/A	N/A		0.832		2	1	492	62	□▲	
	gij157817478	phosphoinositide-3-kinase, class 2a	N/A	0.041	0.623	0.705	0.660	13	3	637	36	□	
	gij58865906	phospholipase D family, member 3	1.000	0.113	1.126	0.965	0.908	10	3	302	163	●	Yes
	gij8394053	phosphoribosyl pyrophosphate synthetase 1	0.783	0.065	0.713	0.797	0.841	7	3	556	46	●	
	gij11560087	phosphorylase, glycogen, liver	N/A	0.112	0.889	1.013	0.788	22	3	206	323	□	Yes
	gij11693154	platelet-activating factor acetylhydrolase alpha 2 subunit	0.779	0.181	0.884	0.882	0.570	12	3	394	91	●	
	gij13929078	platelet-activating factor acetylhydrolase beta subunit	0.895	0.182	0.951	1.043	0.692	4	3	502	60	●	
	gij13929086	polymerase (RNA) I polypeptide A	N/A	0.033	0.999	1.011	1.062	9	3	485	63	□	
	gij21489987	prenylcysteine oxidase 1	0.918	0.032	0.948	0.920	0.885	16	3	466	67	●	
	gij197384556	prenylcysteine oxidase 1	N/A	N/A			0.961	2	1	633	36	▲	
	gij6981324	prolyl 4-hydroxylase, beta polypeptide	0.582	N/A			0.582	3	1	474	66	●	
	gij9507061	proprotein convertase subtilisin/kexin type 1 inhibitor	0.611	0.046	0.649	0.624	0.560	63	3	76	1910	●	
	gij6981420	protease, serine, 2	0.552	0.038	0.549	0.516	0.592	31	3	157	583	●	
	gij56961640	protein-L-isoaspartate (D-aspartate) O- methyltransferase 1	0.831	0.079		0.887	0.776	3	2	730	29	●	
	gij31543464	pyruvate carboxylase	N/A	0.135	0.891	1.082		7	2	551	47	□	
	gij56090293	pyruvate dehydrogenase (lipoamide) beta	N/A	N/A		0.953		3	1	419	79	□	
	gij113205496	pyruvate dehydrogenase complex, component X	N/A	0.121	0.906	0.914	1.120	10	3	777	26	□	
	gij109503592	Pyruvate dehydrogenase E1 component alpha subunit, somatic form, mitochondrial precursor (PDHE1-A type I) isoform 1	0.735	0.119	0.765	0.835	0.604	18	3	239	242	●	
	gij62665891	pyruvate kinase 3	N/A	0.058	0.944	0.878	0.827	61	3	135	803	□	
	gij62662888	pyruvate kinase 3	N/A	0.058	0.944	0.879	0.827	60	3	136	803	□	
	gij16757994	pyruvate kinase, muscle	0.867	0.055	0.920	0.871	0.811	98	3	109	1363	●	Yes
	gij58865630	serine peptidase inhibitor	N/A	N/A			1.439	2	1	724	30	▲	
	gij51036655	serine protease inhibitor alpha 1	0.724	0.114	0.602	0.828	0.744	12	3	233	253	●	
	gij6981710	tyrosine 3-monooxygenase/tryptophan 5- monooxygenase activation protein, eta polypeptide	0.785	0.120	0.823	0.882	0.651	11	3	214	293	●	
	gij109459185	ubiquitin specific peptidase 17	0.981	0.198	0.880	0.854	1.209	8	3	814	25	●	
	gij157818981	ubiquitin specific peptidase 26	N/A	0.042	0.864	0.885	0.946	10	3	240	241	□	
	gij109489413	ubiquitin-conjugating enzyme E2O	N/A	0.026	1.025	1.074	1.032	11	3	408	88	□	
<b>Uncharacterized proteins</b>	gij71361625	adaptin ear-binding clathrin-associated protein	0.713	0.125	0.773	0.798	0.569	18	3	292	180	●	
	gij157818775	AF4/FMR2 family, member 1	N/A	0.123	0.988	1.046	0.810	10	3	393	92	□	
	gij109510615	ARID domain-containing protein 1C	N/A	0.114	0.811	0.769	0.596	10	3	695	32	□	
	gij197385182	BTB (POZ) domain containing 17	1.253	0.177	1.073	1.258	1.427	8	3	360	111	●	Yes
	gij109507594	CG14299-PA, isoform A	N/A	0.030	0.212	0.264	0.264	31	3	359	113	□	
	gij109478769	CG14535-PA	N/A	0.121	0.906	0.914	1.120	10	3	778	26	□	



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	gij109503703	CG14998-PC, isoform C	N/A	0.157	1.560	1.355	1.664	45	3	517	56	□	
	gij109458713	CG17233-PA, isoform A	N/A	0.100	1.184	1.103	1.303	14	3	578	41	□	
	gij109469969	CG30327-PA isoform 2	0.198	0.091	0.263	0.236	0.094	27	3	321	140	●	
	gij62661017	CG32542-PA	1.132	0.159	1.244	1.020		5	2	758	27	●	
	gij109512756	CG32793-PA	N/A	0.033	0.999	1.011	1.062	9	3	490	63	□	
	gij109500758	CG5514-PB, isoform B	N/A	0.177	0.521	0.827	0.520	33	3	494	61	□	
	gij62642463	CG5882-PA	N/A	0.056	1.122	1.045	1.012	10	3	773	27	□	
	gij109508221	CG6405-PA	N/A	0.101	1.093	0.952	1.149	17	3	301	164	□	
	gij62656526	CG7544-PA	N/A	0.026	1.025	1.074	1.032	11	3	407	88	□	
	gij109479775	chromosome 14 open reading frame 145,2	N/A	0.045	1.109	1.199	1.154	37	3	173	445	□	
	gij109487543	ciliary rootlet coiled-coil, rootletin	N/A	0.114	0.811	0.769	0.596	10	3	691	32	□	
	gij157819161	cisplatin resistance-associated overexpressed protein	0.939	0.135	1.017	1.016	0.783	9	3	340	121	●	
	gij157819993	coiled-coil domain containing 112	N/A	0.008	1.025	1.014		8	2	661	35	□	
	gij109511560	coiled-coil domain containing 22	0.121	0.020	0.107	0.112	0.143	31	3	834	24	□	
	gij62078459	coiled-coil domain containing 45	N/A	0.230	1.206	0.880		2	2	749	28	▲	
	gij157786710	coiled-coil domain containing 46	0.818	0.047	0.800	0.871	0.782	10	3	547	49	●	
	gij164565360	CTTNBP2 N-terminal like	6.605	2.429	5.633	4.814	9.370	7	3	361	111	●	
	gij109483500	Dmx-like 2	0.971	0.047	1.014	0.979	0.921	183	3	57	2686	●	Yes
	gij109479839	echinoderm microtubule associated protein like 5	1.699	0.277	1.541	1.537	2.019	58	3	117	1131	●	
	gij58865448	EH-domain containing 1	0.749	0.190	0.728	0.949	0.571	5	3	437	73	●	Yes
	gij51948422	es1 protein	N/A	0.315	0.994	0.549		2	2	683	33	▲	
	gij210032282	F-box protein 31	N/A	0.891	5.482	4.347	6.104	23	3	290	181	□	
	gij62122956	GRAM domain containing 1A	0.698	0.175	0.521	0.703	0.871	11	3	376	104	●	
	gij109495994	E6-AP	4.958	3.179	1.287	6.734	6.852	12	3	524	54	●	
	gij109508134	hydrocephalus inducing	0.525	0.454	0.846	0.204		5	2	512	57	●	
	gij109480930	hypothetical protein	N/A	0.028	0.761	0.801		3	2	413	83	□	
	gij109472333	hypothetical protein	1.449	0.012	1.440	1.458		7	2	433	74	●	
	gij109465947	hypothetical protein	2.585	3.468	0.132	5.037		5	2	455	70	●	
	gij109480639	hypothetical protein	N/A	0.033	0.999	1.011	1.062	9	3	476	65	□	
	gij109483829	hypothetical protein	N/A	2.511	6.283		9.834	3	2	596	39	□	
	gij109468882	hypothetical protein	0.121	0.017	0.110	0.112	0.140	22	3	681	33	●	
	gij109468366	hypothetical protein	N/A	0.114	0.811	0.769	0.596	10	3	694	32	□	
	gij109485816	hypothetical protein	1.243	0.065	1.168	1.285	1.276	4	1	767	27	●	
	gij109508404	hypothetical protein	N/A	0.121	0.906	0.914	1.120	10	3	776	26	□	
	gij109460660	hypothetical protein	0.679	0.014	0.689	0.669		4	2	792	26	●	
	gij109486134	hypothetical protein	N/A	0.231	1.071	1.397		5	2	802	25	□	
	gij109489461	hypothetical protein	N/A	N/A	0.846			3	1	525	53	□	
	gij56605650	hypothetical protein LOC288269	N/A	0.025	0.962	0.915	0.950	24	3	462	68	□	
	gij109495367	hypothetical protein LOC288545	0.905	0.047	0.871	0.938		5	2	688	32	●	
	gij68163364	hypothetical protein LOC290912	N/A	N/A			0.724	3	1	504	59	□	
	gij197385174	hypothetical protein LOC292138	1.690	N/A			1.690	2	1	740	29	□▲	
	gij157819829	hypothetical protein LOC300783	0.783	0.094		0.850	0.717	6	2	305	160	●	
	gij157823958	hypothetical protein LOC301388	0.823	0.068	0.745	0.862	0.863	18	3	172	448	●	Yes
	gij81295339	hypothetical protein LOC304285	1.253	0.242	1.496	1.012	1.251	25	3	208	308	●	
	gij62078781	hypothetical protein LOC309029	N/A	0.007	0.094	0.095	0.106	18	3	251	217	□	
	gij148539967	hypothetical protein LOC314730	N/A	0.058	0.848	0.929		8	2	618	37	□	
	gij62078989	hypothetical protein LOC360867	N/A	0.231	1.071	1.397		5	2	805	25	□	
	gij62079101	hypothetical protein LOC362220	0.182	0.031	0.146	0.203	0.195	22	3	279	193	●	Yes
	gij157821863	hypothetical protein LOC365627	1.055	0.021	1.050	1.078	1.037	28	3	170	457	●	Yes
	gij157818667	hypothetical protein LOC498294	N/A	0.121	0.906	0.914	1.120	10	3	780	26	□	
	gij197386330	hypothetical protein LOC499587	0.735	0.004	0.739	0.731	0.735	23	3	312	153	●	Yes
	gij169234838	hypothetical protein LOC683402	0.993	0.181	0.953	1.191	0.835	10	3	317	147	●	
	gij109486474	KIAA1913	N/A	0.225	2.374	1.926	2.189	14	3	397	91	□	
	gij109503394	KM-HN-1 protein	N/A	0.046	0.799	0.876	0.792	35	3	188	397	□	

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	gij109472574	MICAL	N/A	0.069	1.113	1.169	1.032	24	3	518	55	□	
	gij160333093	mossy-fiber terminal-associated vertebrate-specific presynaptic protein	0.814	0.012	0.802	0.825	0.815	39	3	185	397	●	Yes
	gij109480505	neuron navigator 3	N/A	0.128	0.894	1.150	1.015	14	3	807	25	□	
	gij11067407	Neuronal protein 4.1	N/A	1.532	4.715	4.528	7.271	16	3	649	35	□	
	gij109501683	Protein KIAA0323	N/A	0.278	1.278	1.319	0.819	5	3	828	24	□	
	gij109485791	Ptc-related CG11212-PA	N/A	0.114	1.193	1.380	1.175	9	3	366	107	□	
	gij109486448	Temporarily Assigned Gene name family member (tag-241)	N/A	0.055	0.891	0.971	0.865	14	3	566	43	□	
	gij109457682	Temporarily Assigned Gene name family member (tag-241)	N/A	0.055	0.891	0.971	0.865	14	3	567	43	□	
	gij109509498	Temporarily Assigned Gene name family member (tag-278)	0.110	0.023	0.094	0.099	0.136	21	3	250	217	●	
	gij109492050	Temporarily Assigned Gene name family member (tag-58)	0.895	0.087	0.916	0.969	0.800	27	3	310	158	●	
	gij62650542	tetratricopeptide repeat domain 15	N/A	2.253	8.389	5.203		2	2	668	34	▲	
	gij157817021	tetratricopeptide repeat domain 3	N/A	0.033	0.999	1.011	1.062	9	3	488	63	□	
	gij157816933	tetratricopeptide repeat domain 7B	N/A	0.436		1.052	0.435	2	2	677	33	▲	
	gij209915579	thioredoxin domain containing 13	0.856	0.303	0.637	1.202	0.728	7	3	369	107	●	
	gij29293817	vacuole 14 protein (VAC14)	N/A	N/A			0.668	2	1	607	38	▲	
	gij109460021	Y40C5A.3	N/A	0.050	1.109	1.199	1.190	36	3	174	445	□	
Others	gij62667352	actin dependent regulator of chromatin	N/A	0.028	0.777	0.826	0.777	28	3	745	28	□	Yes
	gij158138551	alpha-2-macroglobulin	0.153	0.028	0.132	0.142	0.185	15	3	227	269	●	
	gij109499860	Alpha-2-macroglobulin receptor-associated protein	N/A	0.210		0.958	1.255	6	2	540	50	□	
	gij109508860	Alpha-fetoprotein enhancer-binding protein	0.776	0.070	0.726	0.825		3	2	568	42	●	
	gij162287337	apolipoprotein E	0.868	0.056	0.845	0.932	0.827	14	3	304	161	●	Yes
	gij25742626	apoptosis-inducing factor	N/A	0.050	0.947	0.880	0.849	18	3	381	100	□	
	gij157817412	AT rich interactive domain 1A (SWI-like)	0.744	0.195	0.561	0.723	0.950	9	3	344	118	●	
	gij62079163	ATG9 autophagy related 9 homolog A	0.923	0.203		1.067	0.779	3	2	797	26	●	Yes
	gij57770372	atlastin GTPase 1	0.780	0.032	0.795	0.803	0.744	18	3	241	232	●	Yes
	gij109477946	baculoviral IAP repeat-containing 6	0.775	0.108	0.897	0.734	0.692	10	3	657	35	●	
	gij57163991	capping protein muscle Z-line, alpha 2	0.889	0.188		0.755	1.022	7	2	323	136	●	
	gij7106248	cardiac ankyrin repeat protein	N/A	0.034		0.971	1.019	3	2	629	36	□	
	gij109465607	centromere protein E	N/A	0.383		0.791	1.332	6	2	598	39	□	
	gij109469097	centrosomal protein 2,1	N/A	0.033	0.999	1.011	1.062	9	3	482	63	□	
	gij109499601	centrosomal protein 4	N/A	1.207	2.881	0.891	3.069	11	3	581	41	□	
	gij109498047	centrosome associated protein 350	N/A	0.077	1.287	1.387	1.439	19	3	372	107	□	
	gij109481923	centrosome protein cep290	0.575	0.132	0.574	0.707	0.443	32	3	475	66	●	
	gij109507708	chemokine-like factor super family 4	1.238	0.343	0.995		1.480	5	2	440	73	●	
	gij158517902	chondroitin sulfate proteoglycan 6	N/A	0.070	1.041	1.030	0.915	8	3	720	30	□	
	gij157823465	chondroitin sulfate synthase 1	N/A	0.127	0.831	0.794	0.596	12	3	640	35	□	
	gij16905067	crystallin, alpha B	0.805	0.026	0.823		0.787	5	2	322	138	●	
	gij6978725	cytochrome c	0.862	0.143	1.016	0.838	0.732	12	3	460	68	●	
	gij109494685	cytochrome P450, family 2J2B	N/A	0.055	1.005	1.046	1.114	6	3	685	32	□	
	gij47155561	cytoplasmic CAR retention protein	N/A	0.119	0.776	0.868	0.632	13	3	811	25	□	
	gij157822937	cytoplasmic FMR1 interacting protein 1	1.027	0.061	1.037	1.083	0.961	20	3	449	71	●	
	gij61097941	DEAD (Asp-Glu-Ala-Asp) box polypeptide 1	N/A	0.175		0.301	0.548	2	2	737	29	▲	
	gij33186912	DEAD (Asp-Glu-Ala-Asp) box polypeptide 25	N/A	0.008	1.059	1.074	1.071	13	3	402	89	□	
	gij109495842	density-regulated protein isoform 1	N/A	N/A			1.131	2	1	667	34	□▲	
	gij16758848	endoplasmic reticulum protein 29	0.690	0.032	0.699	0.716	0.655	13	3	228	269	●	
	gij157818855	envoplakin	N/A	0.240	1.083	1.267	0.791	12	3	570	42	□	
	gij28460696	eukaryotic translation elongation factor 1a1	0.947	0.023	0.950	0.923	0.968	100	3	63	2403	●	Yes

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	gij50054162	eukaryotic translation elongation factor 1a2	0.891	0.042	0.908	0.922	0.843	74	3	72	2004	●	Yes
	gij61556967	eukaryotic translation elongation factor 1d	N/A	1.226	7.089	4.644	5.717	9	3	326	134	□	
	gij51948418	eukaryotic translation elongation factor 1g	0.852	0.348	1.246	0.722	0.587	12	3	277	194	●	
	gij189217906	eukaryotic translation initiation factor 2,3	N/A	0.146	0.891	1.097		6	2	564	44	□	
	gij109512082	excision repair cross-complementing rodent repair deficiency complementation group 6 - like	N/A	0.028	1.226	1.232	1.180	9	3	621	37	□	
	gij157786896	fission 1 homolog	1.171	0.122		1.085	1.257	8	2	325	135	●	
	gij109470173	FLJ44048 protein	N/A	0.075	1.076	0.958	0.937	12	3	832	24	□	
	gij6980974	glycoprotein 5	2.115	0.190	2.307	1.926	2.112	17	3	398	91	●	
	gij12018260	golgi autoantigen, 2a	0.739	0.118	0.776	0.835	0.607	10	3	546	49	●	
	gij157821653	GRIP (Gcc2)	N/A	0.080	0.939	1.082	0.950	7	3	806	25	□	
	gij16758652	GRIP1 associated protein 1	N/A	0.188	0.528	0.785	0.895	10	3	461	68	□	
	gij62662652	gryzun	0.936	0.069		0.887	0.984	4	2	388	96	●	
	gij6981010	hemoglobin alpha 1 chain	0.778	0.048	0.822	0.785	0.727	66	3	98	1401	●	
	gij60678292	hemoglobin alpha 2 chain	0.769	0.053	0.805	0.793	0.708	67	3	91	1506	●	
	gij17985949	hemoglobin beta chain complex	0.774	0.118	0.809	0.872	0.642	80	3	94	1460	●	
	gij208431712	Hermansky-Pudlak syndrome 5	1.100	0.061	1.037	1.160	1.102	7	3	719	30	●	
	gij157820943	histocompatibility HA-1	1.016	0.059	0.950	1.034	1.064	12	3	676	33	●	
	gij109507921	hook homolog 2	N/A	0.058	0.848	0.929		8	2	616	37	□	
	gij77404375	hypoxia up-regulated 1	N/A	0.114	0.811	0.769	0.596	10	3	693	32	□	Yes
	gij62078619	Immunoglobulin heavy chain (gamma polypeptide)	0.054	0.009	0.046	0.052	0.063	45	3	175	428	●	
	gij120474989	keratin 1	0.106	N/A	0.106			5	1	307	159	●	
	gij57012436	keratin 10	0.361	N/A	0.361			4	1	454	70	●	Yes
	gij114145409	keratin 15	0.875	1.102	0.217	2.148	0.260	10	3	356	113	●	
	gij42409519	keratin 19	0.852	0.805	0.283	1.421		8	2	367	107	●	
	gij57012388	keratin 80	N/A	0.121	1.151	1.217	1.385	42	3	557	45	□	
	gij109475821	Krueppel-related zinc finger protein 3	N/A	0.086	1.174	1.083	1.001	15	3	441	72	□	
	gij109510859	LAS1-like isoform 1	N/A	0.028	1.226	1.232	1.180	9	3	623	37	□	
	gij109472428	leiomodrin 3 (fetal)	N/A	0.059	1.291	1.207		8	2	499	60	□	
	gij67078496	leucine rich repeat interacting protein 2	N/A	0.068	1.216	1.160	1.295	15	3	266	206	□	
	gij56605990	leucine-rich PPR-motif containing	N/A	0.047	1.019	0.938	1.020	12	3	431	74	□	
	gij157819199	leukocyte receptor cluster (LRC) member 1	N/A	0.109	1.528	1.365	1.322	8	3	459	69	□	
	gij157821583	LMBR1 domain containing 2	1.467	N/A			1.467	3	1	721	30	●	
	gij157818917	LPS-responsive vesicle trafficking	0.768	0.080	0.676	0.823	0.805	14	3	261	211	●	
	gij13591985	macrophage migration inhibitory factor	0.624	N/A			0.624	4	1	425	77	●	
	gij157818397	major facilitator superfamily domain containing 4	1.474	0.217	1.709	1.433	1.280	19	3	284	189	●	
	gij41055865	major vault protein	0.495	0.010		0.502	0.488	5	2	291	181	●	
	gij109480695	Matrilin-2 precursor	N/A	0.056	1.205		1.283	11	2	439	73	□	
	gij53850618	melanocyte proliferating gene 1	N/A	0.081	1.040	1.096	1.200	24	3	757	27	□	
	gij109493239	MORC	N/A	0.029	1.278	1.319		4	2	829	24	□	
	gij157821035	Mov101	N/A	N/A			0.936	4	1	558	45	□	
	gij110626141	M-phase phosphoprotein, mpp8	N/A	0.057	0.605	0.686		3	2	535	51	□	
	gij9506901	multiple PDZ domain protein	N/A	0.014	0.868	0.849		6	2	592	39	□	
	gij109472532	Murinoglobulin 1 homolog	N/A	0.032	0.121	0.148	0.185	15	3	232	255	□	
	gij8393759	myelin basic protein 5	0.806	0.137	0.878	0.892	0.647	194	3	43	3367	●	Yes
	gij6981264	neurofibromin 1	N/A	0.652	1.433	0.164	0.540	6	3	756	28	□	Yes
	gij68163453	NLR family member X1	N/A	0.046	0.799	0.876	0.792	35	3	189	397	□	
	gij55926145	non-metastatic cells 2	0.839	0.077	0.844	0.913	0.759	8	3	638	36	●	
	gij16758210	nucleobindin 1	0.664	0.064	0.600	0.728	0.664	15	3	262	210	●	
	gij11072106	nucleobindin 2	N/A	N/A			0.709	2	1	588	40	▲	

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	gij62647182	OG2 homeobox	1.234	0.078		1.179	1.289	3	2	580	41	●	
	gij109480802	otoferlin isoform a	1.025	0.186	0.837	1.209	1.031	8	3	523	54	●	
	gij157820311	OTU domain containing 6B	N/A	N/A	0.281			5	1	783	26	□	
	gij157818497	PDZ domain containing 8	N/A	0.225	2.374	1.926	2.189	14	3	396	91	□	
	gij62652634	PDZ-domain protein scribble	N/A	0.078	1.334	1.417	1.491	26	3	246	228	□	
	gij109460030	polycomb group ring finger 5 isoform 1	N/A	0.079	0.834	0.793	0.946	8	3	343	119	□	
	gij13928822	potassium inwardly-rectifying channel J10	N/A	0.068	0.712	0.746	0.615	9	3	531	52	□	
	gij21955142	pregnancy-zone protein	N/A	N/A	0.320			3	1	675	33	□	
	gij62079221	pre-mRNA cleavage factor I	0.041	N/A	0.041			3	1	815	25	●	
	gij6981410	prion protein	1.349	N/A			1.349	4	1	399	89	●	
	gij109477235	proline arginine rich coiled coil 1 isoform 1	N/A	0.239	1.320		1.658	4	2	664	34	□	
	gij13592043	renin binding protein	N/A	0.054	0.951	0.851	0.865	13	3	354	113	□	
	gij62641247	retinoblastoma binding protein 6 isoform 1 isoform 2	N/A	0.204	0.807	0.911	1.201	7	3	452	70	□	
	gij50511320	ring finger protein 166	N/A	N/A			1.131	2	1	666	34	□ ▲	
	gij56090373	ring finger protein 181	0.562	0.033	0.533	0.557	0.597	6	3	831	24	●	
	gij67846010	rogdi homolog	0.934	0.046	0.980	0.937	0.887	54	3	144	717	●	Yes
	gij109498903	roquin	N/A	0.124	0.860	0.954	0.708	48	3	647	35	□	
	gij157817953	Rpgrip1-like	N/A	1.270	5.441	4.047	6.582	9	3	480	64	□	
	gij6981498	S100 calcium binding protein B	0.715	N/A		0.715		4	1	537	51	●	Yes
	gij16758640	SAC1 (suppressor of actin mutations 1, homolog)	1.057	0.193	0.852	1.081	1.236	4	3	674	33	●	
	gij62659606	SCY1-like 1 binding protein 1	N/A	0.124	0.860	0.954	0.708	48	3	645	35	□	
	gij12083601	secretogranin II	0.643	0.061	0.687	0.668	0.573	15	3	276	194	●	
	gij6981530	secretogranin V	0.673	0.075	0.726		0.619	5	2	364	108	●	
	gij209863130	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3 F	N/A	0.187	0.569	0.833		4	2	500	60	□	
	gij121583784	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B	N/A	0.077	1.287	1.387	1.439	19	3	370	107	□	
	gij109458963	Semaphorin-4B precursor (Semaphorin C)	N/A	0.166	1.049	1.145	0.821	11	3	410	86	□	
	gij109467976	senataxin	N/A	0.089	0.937	0.764	0.890	13	3	295	175	□	
	gij109482734	SET binding factor 1 isoform a	0.979	0.207	0.914	1.211	0.813	24	3	201	348	●	
	gij77627981	shank1	N/A	0.026	0.219	0.264	0.266	34	3	358	113	□	
	gij31543529	signal-regulatory protein alpha	0.979	0.058	0.983	0.920	1.036	11	3	333	127	●	Yes
	gij56605812	sirtuin 2	1.317	0.031	1.283	1.326	1.343	26	3	282	191	●	Yes
	gij157818983	sirtuin 7	N/A	0.065	0.980	1.012	0.888	13	3	632	36	□	
	gij109486481	SMC hinge domain containing 1	N/A	0.143	1.294	1.225	1.499	8	3	469	66	□	
	gij157819469	SNF2 histone linker PHD RING helicase	N/A	1.270	5.441	4.047	6.582	9	3	479	64	□	
	gij109462923	Snf2-related CBP activator protein	N/A	0.053	0.862	0.826	0.758	22	3	690	32	□	
	gij109488158	sterol regulatory element binding factor 1	N/A	0.005	0.937	0.935	0.945	27	3	759	27	□	
	gij77404215	synuclein, beta	N/A	N/A		0.800		2	1	470	66	▲	
	gij109478340	T05H4.3	N/A	0.071	1.109	1.199	1.249	30	3	541	49	□	
	gij109474844	Talin-1	N/A	0.094	0.964	1.023	0.839	12	3	311	158	□	
	gij109497531	tankyrase 1-binding protein	0.961	0.209	1.142	1.009	0.732	3	3	391	94	●	Yes
	gij157822235	TBC1 domain family, member 19	N/A	N/A			2.373	2	1	774	27	□ ▲	
	gij6981642	t-complex 1	0.950	0.090	0.967	1.030	0.854	15	3	255	215	●	Yes
	gij109465178	TD and POZ domain containing 1	0.815	0.063	0.860	0.770		6	2	577	42	●	
	gij148277076	TEA domain family member 3	N/A	0.028	1.226	1.232	1.180	9	3	622	37	□	
	gij16758268	tektin 1	N/A	0.046	0.916	0.941	0.851	5	3	718	30	□	
	gij109512238	testis expressed gene 16	N/A	0.121	0.823	0.892	0.657	19	3	374	106	□	
	gij157818589	tetraspanin 7	0.817	0.151	0.864	0.939	0.649	8	3	520	54	●	

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	gij13786174	timeless homolog	N/A	0.313	0.531	0.478	1.045	5	3	766	27	□	
	gij109468337	titin isoform N2-A	1.163	0.031	1.190	1.129	1.171	24	3	548	49	●	
	gij109470142	titin isoform N2-B	0.857	0.035	0.880	0.876	0.817	87	3	379	103	●	
	gij157821331	transmembrane and coiled-coil domain family 3	N/A	0.048	0.792	0.876	0.792	32	3	586	40	□	
	gij62078521	transmembrane protein 135 (Tmem135)	0.263	0.021	0.246	0.258	0.286	9	3	762	27	●	
	gij16758214	transmembrane protein 21 (Tmem21)	0.868	0.153	0.879	1.015	0.710	10	3	270	202	●	Yes
	gij51948472	transmembrane protein 30A (Tmem30A)	1.105	0.067	1.046	1.091	1.178	43	3	327	132	●	Yes
	gij109479526	transmembrane protein 30B (Tmem30B)	N/A	0.084	0.885	0.973	1.053	9	3	421	78	□	
	gij11067391	transmembrane protein 33,1 (Tmem33,1)	0.984	0.123	0.860	0.987	1.107	13	3	316	150	●	
	gij157820653	transmembrane protein 63C (Tmem63C)	N/A	0.056	1.122	1.045	1.012	10	3	771	27	□	
	gij109507281	transmembrane protein transport domain containing 7	0.785	N/A			0.785	4	1	442	72	●	
	gij12248183	tripartite motif-containing 17	N/A	0.072	1.216	1.160	1.303	14	3	725	29	□	
	gij58865858	Trk-fused	0.810	0.045	0.818	0.850	0.761	17	3	387	97	●	
	gij13929144	trophoblast glycoprotein	0.721	0.026	0.738	0.734	0.691	7	3	378	103	●	
	gij109465666	tubulin tyrosine ligase-like protein 7	1.322	0.069	1.293	1.273	1.401	33	3	395	91	●	
	gij20302032	tudor domain containing 7	0.946	0.119	0.929	1.072	0.835	5	3	786	26	●	
	gij109485829	tudor repeat 2	N/A	0.085	0.668	0.823	0.805	10	3	432	74	□	
	gij38454226	tumor protein D52-like 2	0.757	0.043	0.716	0.801	0.753	16	3	288	184	●	
	gij109459607	tumor protein p53 inducible protein 5	N/A	N/A			0.323	2	1	652	35	□ ▲	
	gij62641302	tumor suppressor candidate 5	2.085	N/A			2.085	4	1	403	89	●	Yes
	gij62461577	visinin-like 1	0.865	0.347	0.663	1.266	0.666	7	3	543	49	●	Yes
	gij68341973	WAS protein family, member 1	0.709	0.067	0.661	0.756		5	2	345	118	●	
	gij109487382	WD repeat and FYVE domain containing 1	1.026	0.116	0.940	1.158	0.981	11	3	176	428	●	Yes
	gij157822497	WD repeat domain 37	1.004	0.045	1.051	0.999	0.961	19	3	242	231	●	
	gij13027430	WD repeat domain 7	0.930	0.051	0.879	0.980	0.932	149	3	58	2658	●	Yes
	gij109480718	WD repeats and SOF domain containing 1	N/A	0.124	0.860	0.954	0.708	48	3	646	35	□	
	gij109504743	WNK lysine deficient protein kinase 2	N/A	0.025		1.403	1.439	2	2	826	25	□ ▲	
	gij13929176	Wolfram syndrome 1	0.565	0.132	0.415	0.616	0.665	10	3	303	161	●	Yes
	gij57527112	WW domain binding protein 11	N/A	0.022	1.083	1.073	1.115	9	3	626	36	□	
	gij58866026	X-linked Kx blood group	0.831	0.710	0.329	1.333		5	2	604	38	●	
	gij76563954	XPMC2 prevents mitotic catastrophe 2 homolog	0.119	0.044	0.072	0.125	0.161	13	3	603	38	●	
	gij110624761	Yip1 domain family, member 5	N/A	0.173	0.555	0.799		2	2	620	37	▲	
	gij109484130	zinc finger protein ZFP isoform 1	0.157	0.052	0.110	0.148	0.213	24	3	383	100	●	
	gij109464513	zinc finger RNA binding protein	N/A	0.077	1.287	1.387	1.439	19	3	373	107	□	
	gij86129562	zinc finger, DHHC-type containing 5	N/A	0.057	0.868	0.787		5	2	612	37	□	
Chaperones	gij25282419	calnexin	0.808	0.051	0.760	0.862	0.802	48	3	161	546	●	
	gij109475300	Calreticulin	0.753	0.002	0.755		0.752	5	2	412	84	●	
	gij40018616	chaperonin containing TCP1, 3g	1.132	0.071	1.090	1.215	1.091	28	3	190	386	●	Yes
	gij76253725	chaperonin containing TCP1, 6Az	1.030	0.021	1.008	1.050	1.033	89	3	107	1366	●	Yes
	gij33414505	chaperonin, 4d	1.185	0.033	1.151	1.218	1.187	85	3	86	1611	●	Yes
	gij13162361	cysteine string protein	1.174	0.086	1.093	1.165	1.263	70	3	101	1390	●	Yes
	gij56799412	DnaJ (Hsp40) homolog, subfamily A, member 2	1.089	0.189	1.223	0.956		9	2	468	66	●	
	gij62543491	DnaJ (Hsp40) homolog, subfamily B, member 11	0.077	0.026	0.060	0.064	0.107	54	3	526	53	●	
	gij157822779	DnaJ (Hsp40) homolog, subfamily C, member 11	N/A	0.089	0.598	0.761	0.740	6	3	516	56	□	

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	gij157817568	DnaJ (Hsp40) homolog, subfamily C, member 13	0.917	0.151	0.761	1.064	0.926	12	3	318	146	•	
	gij157822123	DnaJ (Hsp40) homolog, subfamily C, member 6	0.563	0.063	0.494	0.616	0.580	23	3	151	658	•	
	gij12621094	DnaJ-like protein 2	0.869	0.107	0.965	0.754	0.887	25	3	225	270	•	
	gij25742763	hsp5	N/A	0.067	0.820	0.852	0.723	9	3	202	336	□	Yes
	gij47087121	hsp70 like-1	N/A	0.078	0.784	0.869	0.713	15	3	192	375	□	
	gij13242237	hsp8	0.805	0.087	0.816	0.885	0.713	51	3	118	1128	•	Yes
Proteasome	gij13592141	proteasomal ATPase (SUG1)	0.999	0.054	1.037	0.961		6	2	414	82	•	Yes
	gij15100181	proteasome (prosome, macropain) 26S subunit, ATPase 2	1.112	0.078	1.099	1.196	1.041	8	3	405	88	•	Yes
	gij13928808	proteasome (prosome, macropain) 26S subunit, ATPase 3	1.114	0.118	1.184	1.181	0.977	9	3	309	158	•	Yes
	gij14010879	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1	1.134	0.155	1.224	1.223	0.955	40	3	219	285	•	
	gij157820107	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11	N/A	N/A			1.065	2	1	590	39	▲	
	gij71043862	proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	N/A	N/A		0.910		2	1	513	56	▲	
	gij72255509	proteasome (prosome, macropain) 26S subunit, non-ATPase, 2	1.067	0.213	1.306	0.895	1.000	14	3	217	290	•	Yes
	gij109500155	proteasome (prosome, macropain) activator subunit 4	0.250	0.033	0.212	0.273	0.264	32	3	357	113	•	
	gij8394079	proteasome (prosome, macropain) subunit, beta type 2	0.796	0.153		0.904	0.687	6	2	545	49	•	
	gij25742677	proteasome 26S ATPase subunit 4	0.822	0.297	0.502	1.090	0.876	3	3	508	58	•	Yes
	gij38454206	proteasome, 26S, non-ATPase regulatory subunit 6	0.845	0.170	1.012	0.852	0.672	17	3	204	334	•	
	RNA processing / Translation related	gij157822517	Paf1/RNA polymerase II complex component	N/A	N/A	0.785			3	1	687	32	□
gij46485382		basic helix-loop-helix domain containing, class B, 9	N/A	0.044	0.967	1.029		8	2	446	71	□	
gij157821409		bromodomain and PHD finger containing, 3	N/A	0.065	0.980	1.012	0.888	13	3	701	31	□	
gij157821281		bromodomain and WD repeat domain containing 1	N/A	0.068	0.712	0.746	0.615	9	3	530	52	□	
gij109499357		bromodomain, testis-specific	0.281	N/A	0.281			5	1	782	26	•	
gij109482654		CAP-binding protein complex interacting protein 1	N/A	0.071	1.086	1.197	1.217	19	3	571	42	□	
gij16758920		cullin-associated and neddylation-dissociated 1	N/A	N/A			0.503	2	1	444	71	▲	
gij214010196		DNA methyltransferase 1	N/A	0.096	0.754	0.769	0.596	14	3	702	31	□	
gij62650768		DNA polymerase 2e	N/A	0.077	1.287	1.387	1.439	19	3	371	107	□	
gij157821293		doublesex and mab-3 related transcription factor 2	0.422	0.277	0.255	0.269	0.741	20	3	820	25	•	
gij189085373		heat shock transcription factor 2 binding protein	N/A	0.033	0.839	0.878	0.812	25	3	684	32	□	
gij109480606		helicase (DNA) B	N/A	0.170	0.761	0.800	1.074	19	3	426	77	□	
gij13928926		MYB binding protein 1a	N/A	0.053	1.119	1.199	1.220	34	3	561	44	□	
gij62078885		nucleolar protein 10	N/A	0.873	5.410	4.314	6.040	27	3	280	192	□	
gij109508423		nucleotide-binding oligomerization domains	N/A	0.129	1.090	1.273		2	2	784	26	□▲	
gij109507755		nucleotide-binding oligomerization domains	N/A	0.129	1.090	1.273		2	2	785	26	□▲	
gij157817831		poly A binding protein, cytoplasmic 2	N/A	0.211	1.305	1.118	1.539	30	3	122	1003	□	
gij198386356		poly A binding protein, cytoplasmic 4	1.555	0.180	1.515	1.399	1.752	6	3	471	66	•	
gij160333518	poly A binding protein, cytoplasmic 5	0.736	0.122	0.818	0.794	0.596	13	3	552	47	•		
gij19705459	poly(A) binding protein, cytoplasmic 1	1.393	0.221	1.298	1.235	1.646	54	3	90	1509	•		

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	gij53850638	polypyrimidine tract binding protein 2	1.269	0.168	1.457	1.134	1.217	12	3	401	89	●	
	gij13592053	ribosomal protein L10	0.850	0.072		0.799	0.901	7	2	569	42	●	
	gij13592055	ribosomal protein L13	2.627	3.167	6.283	0.875	0.724	24	3	308	159	●	Yes
	gij109472445	ribosomal protein L13	N/A	0.031		0.768	0.724	3	2	436	73	□	
	gij27679772	ribosomal protein L13	0.810	0.122		0.897	0.724	4	2	435	73	●	
	gij12621122	ribosomal protein L14	0.685	0.131	0.538	0.790	0.727	8	3	243	231	●	
	gij114145740	ribosomal protein L14	N/A	0.131	0.538	0.790	0.727	8	3	244	231	□	
	gij20806169	ribosomal protein L15	0.847	0.277	0.651		1.043	4	2	514	56	●	
	gij14389297	ribosomal protein L19	N/A	0.188	1.025	1.014	0.694	12	3	447	71	□	Yes
	gij27687435	ribosomal protein L29	0.909	0.262	0.607	1.074	1.045	8	3	472	66	●	
	gij62654378	ribosomal protein L29	N/A	0.262	0.607	1.074	1.045	8	3	473	66	□	
	gij38454246	ribosomal protein L3	N/A	0.046	0.799	0.876	0.792	35	3	186	397	□	Yes
	gij11968078	ribosomal protein L31	0.771	N/A			0.771	3	1	697	31	●	
	gij13592051	ribosomal protein L5	0.759	0.036	0.718	0.786	0.772	13	3	507	58	●	
	gij198278505	ribosomal protein L7	0.812	0.148	0.685	0.974	0.777	15	3	382	100	●	Yes
	gij62661785	ribosomal protein P2	0.688	0.080	0.777	0.664	0.623	7	3	182	408	●	
	gij13592069	ribosomal protein S10	0.956	0.052	1.008	0.954	0.904	14	3	283	190	●	
	gij62655953	ribosomal protein S10	N/A	0.037		0.957	0.904	12	2	286	185	□	
	gij27663114	ribosomal protein S10	N/A	0.075		1.012	0.906	11	2	289	182	□	
	gij39930505	ribosomal protein S13	0.825	0.134	0.968	0.805	0.702	23	3	183	407	●	
	gij12083607	ribosomal protein S14	0.913	0.154	1.086	0.861	0.791	24	3	162	491	●	Yes
	gij109458449	ribosomal protein S16	0.921	0.009	0.917	0.915	0.931	23	3	152	641	●	
	gij8394215	ribosomal protein S17	0.888	0.248		0.713	1.063	8	2	738	29	●	
	gij47087103	ribosomal protein S18	0.891	0.180		1.019	0.764	9	2	331	130	●	
	gij82654220	ribosomal protein S19	0.593	0.048	0.618	0.622	0.538	22	3	193	374	●	Yes
	gij53850582	ribosomal protein s25	0.753	0.143		0.855	0.652	7	2	315	151	●	
	gij13592077	ribosomal protein S27a	0.882	0.069	0.804	0.909	0.933	50	3	133	816	●	Yes
	gij57164151	ribosomal protein S3	0.904	0.108	0.970	0.961	0.779	27	3	160	547	●	Yes
	gij62645168	ribosomal protein S3	N/A	0.112	0.905	0.961	0.746	17	3	264	207	□	
	gij8394221	ribosomal protein S3a	0.445	0.513	0.083	0.808		3	2	663	34	●	
	gij56090273	ribosomal protein S4, X-linked	1.116	0.324	1.345	0.887		7	2	420	79	●	Yes
	gij58865712	ribosomal RNA processing 1 homolog	N/A	0.074	0.623	0.697	0.548	5	3	822	25	□	
	gij11560055	RNA binding, signal transduction associated 3	N/A	0.035	0.771	0.820		3	2	708	31	□	
	gij189095262	RNA polymerase I2	N/A	2.181	1.086	4.314	5.241	17	3	573	42	□	
	gij62078703	RNA polymerase II associated protein 2	N/A	0.115	0.929	0.914	1.120	9	3	467	66	□	
	gij109464152	RNA polymerase II elongation factor ELL2	N/A	0.026	1.007	1.058	1.029	12	3	731	29	□	
	gij18959266	RNA-binding, signal transduction associated 2	N/A	0.035	0.771	0.820		3	2	707	31	□	
	gij55741823	threonyl-tRNA synthetase	N/A	0.064	1.093	1.146	1.018	33	3	510	58	□	
	gij38259192	topoisomerase (DNA) II alpha	N/A	0.283	1.162	1.133	0.658	13	3	457	70	□	
	gij109502181	topoisomerase (DNA) II beta	N/A	0.280	1.162	1.121	0.658	12	3	456	70	□	
	gij82654188	transcription factor CP2-like 2	N/A	0.049	1.103	1.082	1.010	3	3	689	32	□	
	gij34878862	transcriptional activator protein alpha	0.191	0.100	0.094	0.293	0.187	24	3	221	277	●	
	gij12018252	transketolase	0.715	0.211	0.669	0.945	0.530	10	3	341	120	●	Yes

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**Definition and abbreviations**

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Column D	Average protein ration from the three independent biological replicates
Column E	Standard deviation for the VGLUT-1/VGAT ratio for the three independent replicates
Column F	VGLUT-1/VGAT protein ratio (median) for biological replicate 1
Column G	VGLUT-1/VGAT protein ratio (median) for biological replicate 2
Column H	VGLUT-1/VGAT protein ratio (median) for biological replicate 3
Column I	Total number of peptides used for quantitation
Column J	Number of biological replicates the protein is identified in
Column K	Mascot search engine (v.2.2) protein hit number
Column L	Mascot search engine (v.2.2) protein score
Column N	Protein identified in Takamiri et al (Molecular anatomy of a trafficking organelle, Cell, 2006)
•	Protein quantitation done with min 3 peptides including unique peptides
□	No ratio indicated due to lack of unique peptides for quantitation
▲	No ratio indicated due to less than 3 peptides available for quantitation
IP	Imunoprecipitation/immunoisolation
S.D.	Standard deviation



**Supplemental Table 2. All proteins with significant differential expression.**

GI #	Protein Name	Prot Ratio (Ave for IPs)	S.D. (ratio for IPs)	Enriched in	Protein Group	SV protein
gi 33667087	syntaxin 1A	2.156	0.685	VGLUT-1	SNARE proteins (Trafficking)	yes
gi 19173774	RAP2B	1.948	0.332	VGLUT-1	Small GTPases and related proteins	No
gi 21489979	ADP-ribosylation factor GTPase activating	5.080	3.772	VGLUT-1	Small GTPases and related proteins	No
gi 20301992	synaptotagmin 17	1.743	0.203	VGLUT-1	Trafficking and SV membrane proteins	No
gi 9507171	synaptotagmin 5	1.765	0.136	VGLUT-1	Trafficking and SV membrane proteins	No
gi 148356226	synaptotagmin 1	1.801	0.201	VGLUT-1	Trafficking and SV membrane proteins	yes
gi 6981622	synaptophysin	1.802	0.329	VGLUT-1	Trafficking and SV membrane proteins	yes
gi 20301966	synaptotagmin 12	1.918	0.119	VGLUT-1	Trafficking and SV membrane proteins	yes
gi 77157795	MAL2	2.164	0.161	VGLUT-1	Trafficking and SV membrane proteins	yes
gi 30017417	ATP-binding cassette, A1	0.126	0.068	VGAT	Trafficking and SV membrane proteins	No
gi 13929188	reticulon 4	0.444	0.119	VGAT	Trafficking and SV membrane proteins	No
gi 17530967	Na/Ca exchanger 2 (Slc8a,2)	1.947	0.225	VGLUT-1	Transporters	No
gi 78214331	Na/ca exchanger 1 (Slc8a,1)	2.004	0.626	VGLUT-1	Transporters	No
gi 109497812	SV31	2.021	0.195	VGLUT-1	Transporters	yes
gi 148747140	GLUT-3	2.443	0.545	VGLUT-1	Transporters	No
gi 61557417	ZnT-3	2.460	0.063	VGLUT-1	Transporters	yes
gi 17105360	SV2B	4.678	0.944	VGLUT-1	Transporters	yes
gi 16758726	VGLUT-1	5.496	1.057	VGLUT-1	Transporters	yes
gi 157786986	Slc35f5	0.083	0.016	VGAT	Transporters	?
gi 13929106	VGAT	0.132	0.025	VGAT	Transporters	yes
gi 13928804	SV2C	0.292	0.035	VGAT	Transporters	yes
gi 36054040	neuronal pentraxin receptor	1.916	0.522	VGLUT-1	Signaling molecules	?
gi 56606098	complement component 1	3.771	0.602	VGLUT-1	Signaling molecules	No
gi 40018582	glycosyltransferase-like 1B	2.075	0.303	VGLUT-1	Metabolic enzymes	No
gi 157819887	lactamase, beta	0.088	0.007	VGAT	Metabolic enzymes	No
gi 40538865	phosphodiesterase 8B	0.361	N/A	VGAT	Metabolic enzymes	No
gi 109465947	hypothetical protein	2.585	3.468	VGLUT-1	Uncharacterized proteins	No
gi 109495994	E6-AP (similar to)	4.958	3.179	VGLUT-1	Uncharacterized proteins	No
gi 164565360	CTTNBP2 N-terminal like	6.605	2.429	VGLUT-1	Uncharacterized proteins	?
gi 109509498	Temporarily Assigned Gene name family nr	0.110	0.023	VGAT	Uncharacterized proteins	?
gi 109468882	hypothetical protein	0.121	0.017	VGAT	Uncharacterized proteins	?
gi 109511560	coiled-coil domain containing 22	0.121	0.020	VGAT	Uncharacterized proteins	?
gi 62079101	hypothetical protein LOC362220	0.182	0.031	VGAT	Uncharacterized proteins	?
gi 109469969	CG30327-PA isoform 2	0.198	0.091	VGAT	Uncharacterized proteins	?
gi 62641302	tumor suppressor candidate 5	2.085	N/A	VGLUT-1	Others	?
gi 6980974	glycoprotein 5	2.115	0.190	VGLUT-1	Others	No
gi 62079221	pre-mRNA cleavage factor I	0.041	N/A	VGAT	Others	No
gi 62078619	Immunoglobulin heavy chain (gamma poly)	0.054	0.009	VGAT	Others	No
gi 120474989	keratin 1	0.106	N/A	VGAT	Others	No
gi 76563954	XPMC2 prevents mitotic catastrophe 2 hon	0.119	0.044	VGAT	Others	No
gi 158138551	alpha-2-macroglobulin	0.153	0.028	VGAT	Others	No
gi 109484130	zinc finger protein ZFP isoform 1	0.157	0.052	VGAT	Others	No
gi 62078521	transmembrane protein 135 (Tmem135)	0.263	0.021	VGAT	Others	?
gi 57012436	keratin 10	0.361	N/A	VGAT	Others	No

<b>GI #</b>	<b>Protein Name</b>	<b>Prot Ratio (Ave for IPs)</b>	<b>S.D. (ratio for IPs)</b>	<b>Enriched in</b>	<b>Protein Group</b>	<b>SV protein</b>
gi 41055865	major vault protein	0.495	0.010	VGAT	Others	No
gi 62543491	DnaJ (Hsp40) homolog, subfamily B11	0.077	0.026	VGAT	Chaperones	No
gi 109500155	proteasome (prosome, macropain) activatc	0.250	0.033	VGAT	Proteasome	No
gi 13592055	ribosomal protein L13	2.627	3.167	VGLUT-1	RNA processing/Translation related	No
gi 34878862	transcriptional activator protein alpha	0.191	0.100	VGAT	RNA processing/Translation related	No
gi 109499357	bromodomain, testis-specific	0.281	N/A	VGAT	RNA processing/Translation related	No
gi 157821293	doublesex and mab-3 related transcription	0.422	0.277	VGAT	RNA processing/Translation related	No
gi 8394221	ribosomal protein S3a	0.445	0.513	VGAT	RNA processing/Translation related	No

**Definition and abbreviations**

Column C	Average protein ration from the three independent biological replicates
Column D	Standard deviation for the VGLUT-1/VGAT ratio for the three independent replicates
Column E	Protein significantly enriched in VGLUT-1 or VGAT SVs
Column F	Functional group of the protein
Column G	Protein know to be a SV protein