

Acession Number	Description	Gene Symbol	Unique peptides	Coverage	Protein Score	Ratio 115/114	Ratio 116/114	Ratio 117/114
IPI00129404	myosin; heavy polypeptide 6; cardiac muscle; alpha	Myh6	190	61.04	25129	0.962	1.126	1.127
IPI00130653	myosin; heavy polypeptide 7; cardiac muscle; beta	Myh7	141	53.39	20291	0.954	1.174	1.173
IPI00468481	mitochondrial ATP synthase beta subunit	Atp5b	38	53.12	15566	0.948	1.153	1.11
IPI00130280	ATP synthase; H+ transporting; mitochondrial F1 complex; alpha subunit; isoform 1	Atp5a1	36	48.28	8553	0.952	1.175	1.117
IPI00230760	myoglobin	Mb	16	71.43	7783	0.937	1.251	1.209
IPI00831055	beta-globin	Hbb-b1	14	82.31	5305	0.955	0.906	0.911
IPI00118316	myosin binding protein C; cardiac	Mybpc3	68	46.87	5014	0.942	1.255	1.214
IPI00133392	myosin; light polypeptide 3	Myl3	22	72.06	4439	0.953	1.015	1.03
IPI00114593	actin; alpha; cardiac muscle 1	Actc1	29	51.19	3994	0.953	1.102	1.093
IPI00115564	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator); member 4	Slc25a4	19	45.97	3976	0.968	1.201	1.203
IPI00323592	malate dehydrogenase 2; NAD (mitochondrial)	Mdh2	25	67.75	3840	0.969	1.26	1.248
IPI00120076	sarcomeric mitochondrial creatine kinase	Ckmt2	25	46.54	3829	0.96	1.224	1.156
IPI00131695	albumin	Alb	47	66.28	3530	0.946	1.349	1.342
IPI00116074	aconitase 2; mitochondrial	Aco2	41	48.46	3272	0.963	1.299	1.296
IPI00318614	isocitrate dehydrogenase 2 (NADP+); mitochondrial	Idh2	34	58.63	3262	0.967	1.342	1.347
IPI00756257	Titin	Ttn	182	5.73	3015	0.947	1.063	1.058
IPI00468665	myosin; heavy polypeptide 13; skeletal muscle	Myh13	40	12.18	2923	0.963	1.141	1.134
IPI00469114	Hemoglobin subunit alpha	Hba-a1	8	46.48	2825	0.98	0.927	0.952
IPI00226430	3-ketoacyl-CoA thiolase; mitochondrial	Acaa2	22	53.65	2816	0.938	1.44	1.435
IPI00110850	actin; beta	Actb	25	43.73	2748	0.95	1.155	1.133
IPI00555015	myosin; light polypeptide 2; regulatory; cardiac; slow	Myl2	17	74.1	2600	0.915	1.077	1.082
IPI00308885	heat shock protein 1 (chaperonin)	Hspd1	41	47.29	2375	0.929	1.263	1.068
IPI00338964	ATPase; Ca++ transporting; slow	Atp2a2	45	33.43	2031	0.963	1.101	1.104

	twitch 2 isoform a							
IPI00223092	mitochondrial trifunctional protein; alpha subunit	Hadha	42	42.73	2005	0.984	1.179	1.168
IPI00113141	citrate synthase	Cs	22	32.76	1959	0.958	1.295	1.243
IPI00117312	glutamate oxaloacetate transaminase 2; mitochondrial	Got2	25	40.93	1840	0.969	1.32	1.288
IPI00123316	Tropomyosin alpha-1 chain	Tpm1	30	66.2	1705	0.954	1.047	1.002
IPI00930784	NADH dehydrogenase (ubiquinone) Fe-S protein 1	Ndufs1	35	46.49	1677	0.96	1.134	1.148
IPI00131424	Carnitine O-palmitoyltransferase 2; mitochondrial	Cpt2	18	26.9	1675	0.931	1.185	1.184
IPI00118825	mCG19869	Csl	12	18.24	1674	0.961	1.284	1.22
IPI00273646	glyceraldehyde-3-phosphate dehydrogenase	Gm12033	15	35.44	1631	0.94	1.667	1.655
IPI00311682	Na ⁺ /K ⁺ -ATPase alpha 1 subunit	Atp1a1	33	28.45	1626	0.967	1.093	1.071
IPI00845840	Isoform M1 of Pyruvate kinase isozymes M1/M2	Pkm2	23	38.04	1572	0.915	1.32	1.313
IPI00227835	tropomyosin 1; alpha	Tpm1	26	58.8	1560	0.95	1.037	1.015
IPI00121440	electron transferring flavoprotein; beta polypeptide	Etfb	14	39.61	1551	0.987	1.297	1.294
IPI00127596	muscle creatine kinase	Ckm	26	54.33	1490	0.955	1.207	1.205
IPI00880839	heat shock protein 9	Hspa9	35	46.39	1443	0.982	1.306	1.277
IPI00119138	ubiquinol cytochrome c reductase core protein 2	Uqcrc2	27	43.05	1375	0.973	1.157	1.171
IPI00221402	fructose-bisphosphate aldolase A	Aldoa	25	52.47	1363	0.947	1.53	1.537
IPI00626237	oxoglutarate dehydrogenase (lipoamide)	Ogdh	32	30.21	1328	0.986	1.283	1.289
IPI00894588	long-chain acyl-CoA dehydrogenase	Acadl	19	36.28	1325	0.993	1.394	1.382
IPI00127841	solute carrier family 25; member 5	Slc25a5	12	33.22	1293	0.962	1.19	1.191
IPI00228150	inner membrane protein; mitochondrial	Immt	34	44.12	1270	0.939	1.017	1.012
IPI00323357	heat shock protein 8	Hspa8	29	40.4	1235	0.954	1.393	1.398
IPI00132050	NADH dehydrogenase (ubiquinone) 1; subcomplex unknown; 2	LOC675851	9	45	1213	0.948	1.128	1.092
IPI00309964	nicotinamide nucleotide transhydrogenase	Nnt	35	30.2	1162	0.947	0.893	0.873
IPI00154054	acetyl-Coenzyme A	Acat1	19	43.16	1158	0.955	1.254	1.208

	acetyltransferase 1 precursor							
IPI00129928	Fumarate hydratase; mitochondrial	Fh1	16	29.39	1141	0.958	1.295	1.316
IPI00228548	enolase 3; beta muscle isoform 2	Eno3	18	39.86	1138	1.035	1.403	1.389
IPI00119203	acyl-Coenzyme A dehydrogenase; very long chain	Acadvl	31	48.02	1123	0.971	1.187	1.163
IPI00224456	sarcalumenin	Srl	25	26.26	1122	1.01	1.23	1.223
IPI00229080	heat shock protein 1; beta	Hsp90ab1	28	37.57	1049	0.944	1.507	1.456
IPI00153660	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex; mitochondrial	Dlat	17	25.23	1046	0.959	1.212	1.204
IPI00123319	tropomyosin 2; beta	Tpm2	16	36.97	1029	0.963	1.039	1.02
IPI00117978	cytochrome c oxidase subunit IV isoform 1	Cox4i1	15	67.46	1027	0.955	1.114	1.09
IPI00123369	LIM domain binding 3 isoform b	Ldb3	23	30.11	1015	0.966	1.413	1.375
IPI00116753	electron transferring flavoprotein; alpha polypeptide	Etfa	18	55.56	1010	0.967	1.3	1.294
IPI00222419	cytochrome c; somatic	Gm10053	15	67.62	1007	0.954	1.189	1.216
IPI00225275	muscle glycogen phosphorylase	Pygm	33	35.04	1007	0.958	1.213	1.203
IPI00261627	succinate-Coenzyme A ligase; ADP-forming; beta subunit	Sucla2	29	45.36	1005	0.947	1.284	1.266
IPI00115823	myomesin 2	Myom2	32	23.44	991	0.968	0.985	0.998
IPI00420569	Na ⁺ /K ⁺ -ATPase alpha 2 subunit	Atp1a2	13	12.84	985	0.961	1.131	1.128
IPI00387557	actinin alpha 2	Actn2	32	39.37	983	0.953	1.01	1.002
IPI00229510	L-lactate dehydrogenase B	Ldhb	17	44.61	967	0.971	1.305	1.287
IPI00229796	brain glycogen phosphorylase	Pygb	23	28.35	966	0.945	1.251	1.262
IPI00139788	transferrin	Trf	32	40.6	941	0.935	1.411	1.407
IPI00336324	Malate dehydrogenase; cytoplasmic	Mdh1	18	44.61	929	0.952	1.362	1.359
IPI00112549	Long-chain-fatty-acid--CoA ligase 1	Acsl1	27	37.63	901	0.97	1.132	1.118
IPI00118384	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; epsilon polypeptide	Ywhae	16	56.86	886	0.983	1.331	1.324
IPI00649152	annexin A6 isoform a	Anxa6	28	43.98	880	1	1.299	1.298
IPI00323624	Complement C3	C3	27	17.44	878	0.97	1.166	1.115
IPI00877205	glutamate oxaloacetate transaminase 1; soluble	Got1	21	42.86	877	0.948	1.376	1.388

IPI00134961	medium-chain acyl-CoA dehydrogenase	Acadm	18	39.67	871	0.968	1.258	1.243
IPI00230351	succinate dehydrogenase Fp subunit	Sdha	18	30.27	849	0.976	1.149	1.128
IPI00136563	carnitine palmitoyltransferase 1B	Cpt1b	22	27.07	836	0.968	1.231	1.236
IPI00111885	Cytochrome b-c1 complex subunit 1; mitochondrial	Uqcrc1	18	29.79	822	0.981	1.118	1.134
IPI00132042	pyruvate dehydrogenase (lipoamide) beta	Pdhb	17	38.16	807	0.936	1.184	1.164
IPI00115607	mitochondrial trifunctional protein; beta subunit	Hadhb	22	29.26	801	0.968	1.186	1.173
IPI00129517	peroxiredoxin 5 precursor	Prdx5	8	40	790	0.965	1.338	1.332
IPI00469542	histidine rich calcium binding protein	Hrc	14	24.39	787	0.917	1.025	0.778
IPI00453777	ATP synthase; H+ transporting; mitochondrial F1 complex; delta subunit precursor	Atp5d	4	20.24	787	0.916	1.017	1.024
IPI00331541	6-phosphofructokinase; muscle type	Pfkm	22	24.49	784	0.923	1.185	1.203
IPI00467833	triosephosphate isomerase 1	Tpi1	12	38.13	775	0.924	1.354	1.342
IPI00420706	leucine-rich PPR motif-containing protein	Lrprrc	31	20.04	775	0.975	1.383	1.367
IPI00342603	oxoglutarate dehydrogenase-like	Ogdhl	18	19.83	771	0.997	1.292	1.288
IPI00462072	enolase 1; alpha non-neuron-like	LOC100044223	15	28.57	769	0.949	1.421	1.424
IPI00133215	NADH dehydrogenase (ubiquinone) 1 beta subcomplex; 7	Ndufb7	8	51.82	766	0.947	1.109	1.098
IPI00274407	Tu translation elongation factor; mitochondrial	Tufm	22	44.69	766	0.946	1.52	1.462
IPI00405227	vinculin	Vcl	28	26.92	751	0.983	1.312	1.277
IPI00676914	PREDICTED: similar to valosin isoform 1	LOC675857	21	25.59	735	0.95	1.363	1.346
IPI00319992	78 kDa glucose-regulated protein	Hspa5	23	39.08	728	0.964	1.328	1.312
IPI00830604	Tpm1 protein	Tpm1	20	45.77	721	0.966	1.076	1.064
IPI00121309	NADH dehydrogenase (ubiquinone) Fe-S protein 3	Ndufs3	11	40.3	718	0.979	1.157	1.097
IPI00319994	L-lactate dehydrogenase A isoform 2	Ldha	14	39.46	712	0.946	1.538	1.503

IPI00111831	Nascent polypeptide-associated complex subunit alpha; muscle-specific form	Naca	37	23.96	691	0.947	1.266	1.227
IPI00337893	pyruvate dehydrogenase E1 alpha 1	Pdha1	21	42.56	691	0.951	1.188	1.181
IPI00265371	ADP/ATP translocase 4	Slc25a31	5	11.56	687	0.955	1.186	1.2
IPI00117689	polymerase I and transcript release factor	Ptrf	18	39.29	678	0.947	1.274	1.284
IPI00118986	ATP synthase; H+ transporting; mitochondrial F1 complex; O subunit	LOC100047429	18	64.32	671	0.924	1.138	1.118
IPI00831423	29 kDa protein	Tpm1	19	50.81	670	0.938	1.076	1.03
IPI00120886	nuclease sensitive element binding protein 1	Ybx1	7	22.05	668	1.006	2.084	1.068
IPI00114342	hexokinase 2	Hk2	24	28.35	657	0.969	1.293	1.283
IPI00462157	tripartite motif-containing 72	Trim72	13	28.72	657	0.939	1.51	1.369
IPI00169925	NADH dehydrogenase ubiquinone flavoprotein 2 precursor	Ndufv2	11	50.4	656	0.967	1.04	1.047
IPI00338309	ryanodine receptor 2; cardiac	Ryr2	45	8.52	655	0.955	1.016	1.022
IPI00555069	phosphoglycerate kinase 1	Pgk1	24	47.24	652	0.952	1.335	1.341
IPI00313475	ATP synthase; H+ transporting; mitochondrial F1 complex; gamma subunit isoform a	Atp5c1	19	43.96	645	0.921	1.098	1.123
IPI00308162	solute carrier family 25; member 12	Slc25a12	17	23.04	632	0.941	1.107	1.078
IPI00338536	succinate dehydrogenase complex; subunit B; iron sulfur (lp)	Sdhb	21	48.23	631	0.964	1.08	1.083
IPI00330804	heat shock protein 1; alpha	Hsp90aa1	20	26.6	622	0.926	1.596	1.564
IPI00553798	AHNAK nucleoprotein isoform 1	Ahnak	27	14.39	617	0.95	1.297	1.259
IPI00223197	troponin I; cardiac 3	Tnni3	15	42.65	615	0.969	1.067	1.065
IPI00228633	Glucose-6-phosphate isomerase	Gpi1	18	26.88	598	0.963	1.417	1.403
IPI00121322	Electron transfer flavoprotein-ubiquinone oxidoreductase; mitochondrial	Etfdh	19	29.87	589	0.951	1.102	1.106
IPI00283611	Hexokinase-1	Hk1	24	22.79	588	0.918	1.158	1.155
IPI00848818	microtubule-associated protein 4	Mtap4	17	16.09	588	0.925	1.629	1.66
IPI00124771	solute carrier family 25 member 3	Slc25a3	15	29.97	575	0.949	1.134	1.108
IPI00753815	Spectrin alpha chain; brain	Spna2	25	11.25	571	0.927	1.212	1.206
IPI00123313	ubiquitin-activating enzyme E1	Uba1	17	18.81	569	0.944	1.433	1.453

	isoform 2							
IPI00461964	aldehyde dehydrogenase family 6; subfamily A1	Aldh6a1	21	38.32	564	0.96	1.301	1.322
IPI00122549	Voltage-dependent anion-selective channel protein 1	Vdac1	11	38.18	560	1.012	1.15	1.161
IPI00132653	3-oxoacid CoA transferase 1	Oxct1	18	29.81	557	0.949	1.342	1.335
IPI00224584	Casq2 protein	Casq2	10	20.37	553	1.044	1.344	1.337
IPI00331692	dodecenoyl-Coenzyme A delta isomerase	Dci	10	38.06	551	1.015	1.365	1.348
IPI00109109	superoxide dismutase 2; mitochondrial	Sod2	7	29.28	548	1.027	1.331	1.226
IPI00649143	enolase 1; alpha non-neuron	Eno1	6	28.51	544	1.011	1.31	1.313
IPI00468203	annexin A2	Anxa2	10	30.68	543	0.981	1.423	1.408
IPI00317309	annexin A5	Anxa5	12	36.68	537	1.015	1.775	1.554
IPI00626132	hydroxysteroid (17-beta) dehydrogenase 10	Hsd17b10	8	37.64	537	1.03	1.379	1.182
IPI00471246	isovaleryl coenzyme A dehydrogenase	Ivd	14	33.73	536	0.941	1.299	1.294
IPI00465786	Talin-1	Tln1	22	9.68	532	0.954	1.429	1.483
IPI00877236	apolipoprotein A-I	Apoa1	15	40.91	529	0.978	1.216	1.108
IPI00387379	2;4-dienoyl CoA reductase 1	Decr1	9	33.13	527	0.976	1.274	1.26
IPI00230124	fatty acid binding protein 3; muscle and heart	Fabp3	7	38.35	522	0.994	1.327	1.294
IPI00135651	solute carrier family 25; member 13	Slc25a13	19	26.18	514	0.971	1.171	1.131
IPI00133240	ubiquinol-cytochrome c reductase; Rieske iron-sulfur polypeptide 1	Uqcrcf1	8	22.26	511	0.946	1.022	1.049
IPI00466069	eukaryotic translation elongation factor 2	Eef2	21	22.73	504	0.963	1.463	1.491
IPI00454049	mitochondrial short-chain enoyl-coenzyme A hydratase 1	Echs1	14	47.59	502	0.982	1.409	1.386
IPI00421223	tropomyosin 4	Tpm4	11	36.69	501	0.953	1.41	1.398
IPI00319830	spectrin beta 2 isoform 1	Spnb2	24	11.17	501	0.967	1.245	1.257
IPI00130804	enoyl coenzyme A hydratase 1; peroxisomal	Ech1	14	38.53	500	0.969	0.99	0.978
IPI00230706	bisphosphoglycerate mutase 2	Pgam2	14	45.45	497	0.955	1.409	1.364
IPI00113347	Carnitine O-acetyltransferase	Crat	16	23.8	497	0.935	1.197	1.219
IPI00331332	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 5	Ndufa5	5	37.93	494	0.919	1.138	1.121

IPI00113712	troponin C; cardiac/slow skeletal	Tnnc1	7	40.99	491	0.947	1.026	1.011
IPI00136134	N-myc downstream regulated gene 2 isoform 1	Ndrp2	16	31	489	0.971	1.07	1.104
IPI00134809	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)	Dlst	15	32.16	488	0.96	1.226	1.107
IPI00321718	B-cell receptor-associated protein 37	Phb2	12	41.14	488	0.957	1.218	1.268
IPI00129577	apoptosis-inducing factor; mitochondrion-associated 1	Aifm1	14	26.96	487	0.947	1.119	1.077
IPI00116154	hypothetical protein LOC100040340	LOC100046079	10	52.71	482	0.938	0.971	0.95
IPI00116498	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; zeta polypeptide	Ywhaz	15	54.69	478	0.955	1.624	1.595
IPI00874456	dihydrolipoamide dehydrogenase	Dld	14	28.68	478	0.966	1.249	1.244
IPI00125929	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 4	Ndufa4	8	56.1	477	0.917	1.057	1.076
IPI00128023	NADH dehydrogenase (ubiquinone) Fe-S protein 2	Ndufs2	15	35.42	473	0.931	1.105	1.086
IPI00122815	prolyl 4-hydroxylase; beta polypeptide	P4hb	15	27.9	468	0.973	1.779	1.72
IPI00753639	titin	Ttn	26	4.87	467	0.984	1.226	1.216
IPI00110588	moesin	Msn	17	23.74	462	0.98	1.582	1.552
IPI00122548	Voltage-dependent anion channel 3	Vdac3	10	39.79	461	0.968	1.099	1.104
IPI00125460	ATP synthase; H+ transporting; mitochondrial F0 complex; subunit F	LOC674583	5	46.3	457	1.056	0.644	0.655
IPI00116748	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10	Ndufa10	12	32.68	450	0.986	1.179	1.211
IPI00130102	desmin	Des	14	28.57	450	1.016	1.407	1.421
IPI00169463	tubulin; beta 2C	Tubb2c	17	35.96	441	0.944	1.769	1.725
IPI00230707	3-monooxygenase/tryptophan 5-monooxygenase activation protein; gamma polypeptide	Ywhag	16	53.44	441	0.957	1.524	1.492
IPI00119667	eukaryotic translation elongation factor 1 alpha 2	Eef1a2	16	23.97	440	0.964	1.457	1.432

IPI00129164	sepiapterin reductase	Spr	8	36.26	439	0.866	1.293	1.309
IPI00121641	troponin T2; cardiac isoform a	Tnnt2	9	25.83	437	0.919	1.088	0.856
IPI00320850	methycrotonoyl-Coenzyme A carboxylase 1 (alpha)	Mccc1	11	18.69	435	0.931	1.296	1.316
IPI00929850	phosphoglucumutase 2	Pgm2	18	30.6	434	0.991	1.377	1.372
IPI00136703	brain creatine kinase	Ckb	7	24.93	434	0.996	1.237	1.224
IPI00133440	prohibitin	Phb	11	43.01	429	0.923	1.17	1.127
IPI00120212	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 9	Ndufa9	16	35.01	428	0.937	1.099	1.107
IPI00880679	29 kDa protein	Tpm3	14	42.91	427	0.936	1.152	1.154
IPI00119876	Cytoplasmic dynein 1 heavy chain 1	Dync1h1	18	4.18	422	0.909	1.393	1.356
IPI00653566	acyl-CoA thioesterase 2	Acot2	13	32.67	411	0.915	1.207	1.2
IPI00116591	Short-chain specific acyl-CoA dehydrogenase; mitochondrial	Acads	8	23.54	410	0.952	1.237	1.182
IPI00230212	glutathione S-transferase mu 1	Gstm1	16	61.01	408	0.966	1.162	1.16
IPI00225390	cytochrome c oxidase subunit VIb polypeptide 1	Cox6b1	7	67.44	406	0.92	0.736	0.733
IPI00664670	Isoform 1 of Filamin-C	Flnc	18	7.49	403	1.023	2.009	1.917
IPI00403810	tubulin; alpha 1C	Tuba1c	14	38.53	396	1.01	2.196	2.153
IPI00133006	NADH dehydrogenase (ubiquinone) 1; alpha/beta subcomplex; 1	Ndufab1	5	13.46	396	1.028	1.253	1.222
IPI00227299	vimentin	Vim	20	41.85	392	0.983	1.689	1.665
IPI00110753	tubulin; alpha 1	Tuba1a	14	38.8	391	1.01	2.196	2.153
IPI00122554	chaperone; ABC1 activity of bc1 complex like	Cabc1	6	10.7	389	0.967	1.078	1.021
IPI00130460	NADH dehydrogenase ubiquinone flavoprotein 1 precursor	Ndufv1	19	32.76	388	0.997	1.133	1.121
IPI00312700	fast skeletal myosin alkali light chain 1 isoform 1f	Myl1	3	16.49	388	0.944	1.031	1.023
IPI00230044	Tpm3 protein	Tpm3	15	47.58	388	0.927	1.162	1.165
IPI00331556	Heat shock 70 kDa protein 4	Hspa4	12	16.41	388	0.952	1.551	1.554
IPI00111218	mitochondrial aldehyde dehydrogenase 2	Aldh2	14	29.29	387	0.978	1.217	1.217
IPI00459725	isocitrate dehydrogenase 3 (NAD+) alpha	Idh3a	13	29.51	382	0.985	1.291	1.28
IPI00515360	perlecan (heparan sulfate proteoglycan 2)	Hspg2	17	5.5	371	0.963	1.082	1.034

IPI00121105	L-3-hydroxyacyl-Coenzyme A dehydrogenase	Hadh	11	25.8	370	0.94	1.31	1.281
IPI00928176	aldehyde dehydrogenase 4A1	Aldh4a1	11	19.22	368	0.97	1.35	1.367
IPI00331223	Striated muscle-specific serine/threonine-protein kinase	Speg	6	2.73	366	0.88	1.141	1.127
IPI00117350	tubulin; alpha 4	Tuba4a	13	32.14	360	0.976	2.053	1.997
IPI00131830	Serine protease inhibitor A3K	Serpina3k	10	27.27	359	1.052	1.035	1.073
IPI00123063	restin	Clip1	10	8.34	358	0.943	1.687	1.738
IPI00307837	eukaryotic translation elongation factor 1 alpha 1	Eef1a1	13	23.81	356	0.922	1.644	1.644
IPI00330523	Propionyl-CoA carboxylase alpha chain; mitochondrial	Pcca	14	24.45	355	0.91	1.335	1.319
IPI00223713	histone cluster 1; H1c	Hist1h1c	12	41.98	353	0.989	1.702	1.691
IPI00117352	tubulin; beta 5	Tubb5	13	26.13	352	0.931	2.024	1.979
IPI00123604	ribosomal protein SA	mCG_122533	4	15.93	352	0.927	1.292	1.342
IPI00133284	es1 protein	LOC100046684	7	29.7	352	1.038	1.357	1.331
IPI00130589	superoxide dismutase 1; soluble	Sod1	9	58.44	350	0.988	1.1	1.093
IPI00132762	TNF receptor-associated protein 1	Trap1	11	17.99	350	0.915	1.353	1.321
IPI00132938	myeloid-associated differentiation marker	Myadm	1	5.31	350	1.203	1.567	1.968
IPI00850133	hypothetical protein LOC219189	1300010F03Rik	19	11.86	349	0.915	1.157	1.176
IPI00117264	Parkinson disease protein 7	Park7	11	46.56	347	0.93	1.435	1.435
IPI00281109	myomesin 1 isoform 2	Myom1	22	14.66	346	1.009	1.117	1.062
IPI00132347	ubiquinol-cytochrome c reductase binding protein	Uqcrb	10	63.06	344	1.003	1.049	1.054
IPI00131086	dynein cytoplasmic 1 intermediate chain 2	Dync1i2	4	7.19	343	0.928	1.445	1.46
IPI00223714	histone cluster 1; H1e	Hist1h1e	9	33.79	340	1.053	1.695	1.699
IPI00869393	catalase	Cat	13	28.46	339	0.954	1.115	1.142
IPI00133562	coiled-coil-helix-coiled-coil-helix domain containing 3	Chchd3	13	46.7	339	1.094	1.231	1.182
IPI00400016	Laminin subunit gamma-1	Lamc1	10	7.41	337	0.935	1.119	0.837
IPI00406442	Succinyl-CoA ligase [GDP-forming] subunit alpha; mitochondrial	Suclg1	12	37.28	332	0.967	1.302	1.312
IPI00754071	22 kDa protein	Prdx6	9	40	332	1.012	1.3	1.278

IPI00116705	fatty acid binding protein 4; adipocyte	Fabp4	9	46.97	331	0.959	1.515	1.426
IPI00469103	lysyl-tRNA synthetase isoform 1	Kars	4	8.33	329	1.051	1.529	1.398
IPI00856568	Isoform 2 of Protein KIAA1881	S3-12	7	14.87	328	0.909	1.09	1.028
IPI00227392	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; eta polypeptide	Ywhah	12	36.59	328	0.974	1.557	1.565
IPI00129526	tumor rejection antigen gp96	Hsp90b1	17	20.82	328	0.969	1.63	1.591
IPI00420577	Cullin-associated NEDD8-dissociated protein 2	Cand2	9	8.34	325	0.955	1.35	1.466
IPI00133399	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 6 (B14)	Ndufa6	6	49.62	324	0.945	1.092	1.084
IPI00620256	lamin A isoform A	Lmna	13	25.26	324	0.936	1.147	1.154
IPI00311175	tubulin; alpha 8	Tuba8	10	24.5	322	0.935	1.983	1.944
IPI00553717	methylcrotonoyl-Coenzyme A carboxylase 2 (beta)	Mccc2	9	19.54	321	0.955	1.356	1.327
IPI00315302	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 2	Ndufa2	4	39.39	316	0.927	1.05	1.032
IPI00463909	HECT; UBA and WWE domain containing 1	Huwe1	5	1.74	315	0.948	1.37	1.264
IPI00135660	serum deprivation response	Sdpr	14	36.6	314	0.926	1.159	1.107
IPI00469942	acyl-CoA synthetase short-chain family member 1	Acss1	15	22.43	313	0.89	1.15	1.131
IPI00122547	voltage-dependent anion channel 2	Vdac2	9	33.56	311	0.947	1.145	1.132
IPI00126635	isocitrate dehydrogenase 3; beta subunit	Idh3b	14	28.39	311	0.984	1.428	1.417
IPI00230715	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 13	Ndufa13	8	43.06	311	1.015	1.233	1.192
IPI00115522	fibrinogen; alpha polypeptide isoform 2	Fga	12	17.06	310	0.954	1.537	1.574
IPI00263863	heat shock protein 1 (chaperonin 10)	Hspe1	11	80.39	309	0.935	1.186	1.182
IPI00228820	glutathione S-transferase mu 2	Gstm2	12	47.71	307	0.983	1.261	1.246
IPI00380436	actinin; alpha 1	Actn1	11	13.34	306	0.934	1.177	1.174
IPI00221629	ADP-ribosylhydrolase like 1	Adprhl1	6	18.41	305	0.876	1.911	1.852
IPI00117657	optic atrophy 1 homolog	Opa1	14	16.77	303	0.979	1.133	1.143
IPI00138892	hypothetical protein LOC666586	Gm11808	6	42.97	302	1.037	1.065	1.039

IPI00323571	apolipoprotein E	Apoe	7	27.01	299	0.957	1.059	1.079
IPI00121288	NADH dehydrogenase (ubiquinone) 1 beta subcomplex; 10	Ndufb10	10	52.27	298	0.948	1.082	1.014
IPI00116283	chaperonin containing Tcp1; subunit 3 (gamma)	Cct3	10	18.17	298	0.89	1.39	1.441
IPI00123181	myosin; heavy polypeptide 9; non-muscle isoform 1	Myh9	19	10.97	297	0.992	1.824	1.798
IPI00331334	BAG family molecular chaperone regulator 3	Bag3	9	23.05	296	0.907	1.608	1.217
IPI00405058	heterogeneous nuclear ribonucleoprotein A2/B1 isoform 2	Hnrnpa2b1	10	38.21	296	1.054	1.284	1.311
IPI00229509	Isoform PLEC-1I of Plectin-1	Plec1	20	4.27	295	0.973	1.353	1.454
IPI00775975	cadherin 13	Cdh13	8	11.48	294	0.964	1.013	1.057
IPI00121788	peroxiredoxin 1	Prdx1	10	40.2	294	0.973	1.421	1.396
IPI00474450	Dystrophin	Dmd	15	4.32	293	0.901	1.155	1.153
IPI00135231	unnamed protein product	ldh1	14	26.78	290	0.957	1.203	1.217
IPI00119945	Nit protein 2	Nit2	3	13.41	286	0.992	1.208	1.133
IPI00224210	ubiquinol-cytochrome c reductase; complex III subunit VII	Uqcrc	6	54.88	284	0.943	1.141	1.164
IPI00855152	Obscurin	Obscn	18	3.91	284	0.991	1.06	1.106
IPI00138274	crystallin; alpha B	Cryab	7	34.29	283	0.954	2.031	1.998
IPI00114894	Myosin-11	Myh11	9	4.51	283	0.997	1.267	1.243
IPI00346073	heat shock 70kDa protein 1B	Hspa1b	6	7.94	283	0.947	1.352	1.378
IPI00127707	poly(rC) binding protein 2 isoform 1	Pcbp2	4	10.77	279	0.899	1.295	1.387
IPI00661635	xin actin-binding repeat containing 1	Xirp1	7	4.47	279	0.878	1.665	1.626
IPI00129755	serine (or cysteine) proteinase inhibitor; clade A; member 1b	Serpina1b	10	17.68	278	1.002	1.366	1.328
IPI00230682	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; beta polypeptide	Ywhab	15	47.97	277	0.949	1.526	1.497
IPI00474783	acetyl-Coenzyme A carboxylase alpha	Acaca	5	3.58	275	0.814	0.559	0.529
IPI00121581	Slmap protein	Slmap	10	21.13	274	0.936	1.881	1.86
IPI00230507	ATP synthase; H+ transporting; mitochondrial F0 complex; subunit d	Atp5h	11	71.43	273	0.967	1.104	1.089

IPI00342163	Protein phosphatase 1 regulatory subunit 3A	Ppp1r3a	6	8.17	273	1.005	1.285	1.162
IPI00751806	Nebulette	Nebi	13	15.94	273	0.934	1.012	1.064
IPI00128484	Hemopexin	Hpx	11	23.48	272	0.958	1.427	1.436
IPI00223757	aldo-keto reductase family 1; member B1	Akr1b3	11	30.38	271	0.955	1.319	1.311
IPI00342938	malonyl CoA:ACP acyltransferase (mitochondrial)	Mcat	2	7.61	270	1.168	1.631	1.178
IPI00114860	Filamin-binding LIM protein 1	Fblim1	1	4.27	270	1.068	1.525	1.352
IPI00125778	transgelin 2	Tagln2	10	48.74	270	0.919	2	1.95
IPI00408378	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; theta polypeptide	Ywhaq	9	26.94	269	0.957	1.567	1.562
IPI00318750	dehydrogenase/reductase (SDR family) member 4; isoform CRA_a	Dhrs4	8	25.09	268	0.98	1.242	1.256
IPI00229534	myristoylated alanine rich protein kinase C substrate	Marcks	6	23.95	268	1.07	2.03	1.968
IPI00154047	3-hydroxyisobutyryl-Coenzyme A hydrolase	Hibch	9	26.75	267	0.932	1.321	1.356
IPI00314736	acidic (leucine-rich) nuclear phosphoprotein 32 family; member A	Anp32a	8	21.86	267	1.005	1.489	1.526
IPI00128209	Adenylate kinase isoenzyme 1	Ak1	12	46.39	266	0.98	1.375	1.361
IPI00117910	peroxiredoxin 2	Prdx2	7	31.31	264	0.954	1.335	1.353
IPI00918862	propionyl Coenzyme A carboxylase; beta polypeptide	Pccb	10	21.07	264	0.955	1.323	1.252
IPI00131204	UDP-glucose pyrophosphorylase 2	Ugp2	13	24.21	264	0.905	1.917	1.89
IPI00318841	eukaryotic translation elongation factor 1 gamma	Eef1g	6	12.13	262	0.863	1.281	1.207
IPI00469351	PREDICTED: similar to heterogeneous nuclear ribonucleoprotein K	Gm4130	3	16.84	261	0.856	1.304	1.298
IPI00169883	sirtuin 5 (silent mating type information regulation 2 homolog) 5	Sirt5	5	18.06	260	1.027	1.212	1.213
IPI00130322	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 7 (B14.5a)	Ndufa7	8	52.21	259	0.896	1.03	1.004
IPI00123190	adenylosuccinate synthase like 1	Adssl1	5	12.91	259	0.901	1.11	1.102

IPI00118899	actinin alpha 4	Actn4	12	12.83	258	0.934	1.174	1.196
IPI00309999	Laminin subunit alpha-2	Lama2	7	2.7	256	1.054	0.943	0.929
IPI00221769	adenylate kinase 3	Ak3	2	11.01	254	0.955	1.329	1.297
IPI00113638	junctophilin 2	Jph2	12	21.12	251	1.04	1.172	1.118
IPI00269750	phosphoglucomutase 5	Pgm5	5	9.35	250	0.922	1.287	1.293
IPI00229008	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4; mitochondrial	Ndufs4	7	32.57	249	1.01	1.127	1.105
IPI00555023	glutathione S-transferase; pi 1	Gstp1	4	16.19	247	0.983	1.293	1.323
IPI00313296	ribonuclease/angiogenin inhibitor 1	Rnh1	5	14.91	247	0.928	1.537	1.519
IPI00116192	peroxiredoxin 3	Prdx3	6	20.23	244	1.007	1.266	1.196
IPI00890322	3-hydroxybutyrate dehydrogenase; type 1	Bdh1	9	24.49	244	0.952	1.325	1.319
IPI00351206	progesterone receptor membrane component 2	Pgrmc2	1	11.52	243	0.889	1.431	1.65
IPI00114017	annexin A7	Anxa7	8	19.44	243	0.933	1.545	1.541
IPI00135068	Mitochondrial import inner membrane translocase subunit TIM44	Timm44	10	23.89	242	0.959	1.293	1.268
IPI00120984	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; 8	Ndufa8	6	40.7	241	0.943	1.193	1.095
IPI00329998	11 kDa protein	Hist1h4b	7	50	241	0.948	1.366	1.328
IPI00133528	golgi phosphoprotein 3	Golph3	1	5.37	241	0.772	1.338	1.455
IPI00344004	13kDa differentiation-associated protein	Ndufa12	5	30.2	240	0.922	1.091	1.109
IPI00123920	Alpha-1-antitrypsin 1-3	Serpina1c	10	14.32	239	0.992	1.354	1.315
IPI00133185	ribosomal protein L14	Rpl14	4	15.67	239	0.97	1.491	1.418
IPI00457898	bisphosphoglycerate mutase 1	Pgam1	7	29.92	238	0.983	1.437	1.409
IPI00459487	succinate-CoA ligase; GDP-forming beta subunit	Suc1g2	11	26.1	237	0.938	1.413	1.386
IPI00118153	cysteine and glycine-rich protein 3	Csrp3	9	44.85	236	0.984	1.899	1.923
IPI00128904	poly(rC) binding protein 1	Pcbp1	4	10.39	235	0.892	1.51	1.401
IPI00112327	metaxin 1 isoform 1	Mtx1	6	13.02	233	0.978	1.154	1.067
IPI00341282	ATP synthase; H+ transporting; mitochondrial F0 complex; subunit b; isoform 1	Atp5f1	11	30.47	233	0.956	1.149	1.107
IPI00115827	Protein NipSnap homolog 2	Gbas	12	22.42	233	0.971	1.353	1.319
IPI00274739	cold shock domain protein A short isoform	Csda	3	18.84	232	1	1.641	1.322

IPI00230754	solute carrier family 25 (mitochondrial carrier oxoglutarate carrier); member 11	Slc25a11	11	41.72	232	0.927	1.144	1.15
IPI00153903	Citrate lyase subunit beta-like protein; mitochondrial	Clybl	9	27.81	231	0.979	1.263	1.25
IPI00223253	heterogeneous nuclear ribonucleoprotein K	Hnrnpk	8	19.65	230	0.946	1.474	1.483
IPI00112719	delta-aminolevulinic acid dehydratase	Alad	4	15.76	230	0.939	1.104	0.987
IPI00315135	translocase of outer mitochondrial membrane 22 homolog	Tomm22	2	22.54	230	1.053	1.327	1.168
IPI00420726	ribosomal protein S9-like	Rps9	8	32.99	229	1.037	1.501	1.471
IPI00315964	Protein-cysteine N- palmitoyltransferase HHAT-like protein	Hhatl	7	13.12	229	0.937	1.028	1.025
IPI00114209	glutamate dehydrogenase 1	Glud1	13	22.4	228	0.887	1.238	1.244
IPI00230569	pUb-R3	Psmd4	4	14.4	227	1.028	1.783	1.372
IPI00224740	profilin 1	Pfn1	3	27.14	225	0.855	1.522	1.519
IPI00458583	heterogeneous nuclear ribonucleoprotein U	Hnrnpu	6	8.13	225	0.914	1.406	1.49
IPI00128522	heat shock protein 1	Hspb1	7	38.28	225	0.908	2.028	2.049
IPI00331394	aspartyl aminopeptidase isoform a	Dnpep	4	10.32	223	1.081	1.52	1.333
IPI00221580	hypothetical protein LOC67892	1810063B 05Rik	1	18.99	223	0.831	0.757	0.648
IPI00124900	Methylglutaconyl-CoA hydratase; mitochondrial	Auh	10	29.62	221	0.931	1.247	1.236
IPI00469268	chaperonin subunit 8 (theta)	Cct8	12	22.99	220	0.885	1.356	1.355
IPI00458870	Ras-interacting protein 1	Rasip1	2	3.12	219	0.768	1.22	1.565
IPI00665734	protein phosphatase 1; regulatory (inhibitor) subunit 12B	Ppp1r12b	5	5.54	219	0.875	1.178	1.109
IPI00114285	glutathione S-transferase omega 1	Gsto1	11	40	218	0.961	1.752	1.727
IPI00221581	eukaryotic translation initiation factor 4B	Eif4b	4	9.66	213	1.058	1.372	1.337
IPI00471441	Ptms protein	Ptms	4	19.91	212	0.945	1.43	1.39
IPI00187405	Isoform 2 of Probable hydrolase PNKD	Pnkd	2	19.72	212	0.979	1.219	1.301
IPI00131177	leucine zipper-EF-hand containing transmembrane protein 1	Letm1	10	15.45	211	1.02	1.172	1.147

IPI00132089	unnamed protein product	Prep	5	9.17	211	0.878	1.455	1.58
IPI00123924	serine (or cysteine) proteinase inhibitor; clade A; member 1d	Serpina1d	11	21.07	210	1.01	1.386	1.35
IPI00554989	mCG121511; isoform CRA_b	Ppia	11	41.92	210	1.055	1.619	1.614
IPI00132623	NADH dehydrogenase (ubiquinone) 1 beta subcomplex; 9	Ndufb9	5	20.11	209	0.97	1.164	1.196
IPI00323816	Selenium-binding protein 2	Selenbp2	11	24.15	209	0.936	1.023	1.006
IPI00112493	apolipoprotein O-like	Apool	10	38.49	208	0.916	1.004	1.001
IPI00459383	ATP-binding cassette; sub-family B (MDR/TAP); member 8	Abcb8	7	9.76	207	0.923	1.064	1.083
IPI00129178	ornithine aminotransferase	Oat	8	18.91	207	0.94	1.42	1.33
IPI00314950	ribosomal protein; large; P0	Rplp0	8	28.08	207	0.954	1.403	1.415
IPI00165854	ubiquitin-conjugating enzyme E2N	Ube2n	5	34.21	205	0.935	1.203	1.207
IPI00347394	hypothetical protein LOC74148	130000110 1Rik	5	4.58	203	0.832	1.257	1.185
IPI00132799	complement component 1; q subcomponent binding protein	C1qbp	3	15.77	203	1.028	1.296	1.25
IPI00673568	PREDICTED: similar to NADH dehydrogenase (ubiquinone) Fe-S protein 6	Gm6415	5	38.79	203	0.991	1.09	1.108
IPI00122740	LRP16 protein	Macrocl1	6	22.91	202	1.001	1.407	1.318
IPI00139795	ribosomal protein; large P2	Rplp2	4	66.96	201	0.902	1.229	1.117
IPI00267295	proteasome 26S non-ATPase subunit 1	Psmcl1	6	7.24	199	0.912	1.362	1.359
IPI00230641	Isoform 2 of Calpastatin	Cast	6	9.88	198	0.943	1.773	1.762
IPI00329942	vacuolar protein sorting 26 isoform b	Vps26a	4	9.19	197	0.97	1.171	1.332
IPI00122265	SH3-binding domain glutamic acid-rich protein like	Sh3bgrl	2	16.67	197	1.036	1.533	1.468
IPI00468999	phosphatidate cytidylyltransferase 2	Cds2	3	6.98	197	0.995	1.109	1.203
IPI00114840	endonuclease G	Endog	6	20.75	196	0.912	1.217	1.313
IPI00123709	A kinase (PRKA) anchor protein (gravin) 12	Akap12	5	4.81	195	0.94	2.022	1.574
IPI00319046	tumor protein D52-like 2	Tpd52l2	4	20	195	0.955	1.366	1.231
IPI00221569	zinc binding alcohol dehydrogenase; domain containing 2	Zadh2	5	16.71	195	0.984	1.241	1.224
IPI00318671	EH-domain containing 4-KJR	Ehd4	10	17.1	195	0.905	1.484	1.472

IPI00172221	dynamin 1-like; isoform CRA_b	Dnm1l	12	16.62	195	0.914	1.265	1.268
IPI00221608	sorting and assembly machinery component 50 homolog	Samm50	9	17.27	191	0.919	0.948	0.971
IPI00124264	Annexin A11	Anxa11	4	6.76	191	0.959	1.279	1.199
IPI00116222	3-hydroxyisobutyrate dehydrogenase precursor	Hibadh	5	21.19	190	0.964	1.291	1.315
IPI00126861	transglutaminase 2; C polypeptide	Tgm2	7	10.79	190	0.917	1.422	1.4
IPI00153919	PKC-potentiated PP1 inhibitory protein	Ppp1r14c	1	12.2	190	1.14	1.715	1.593
IPI00308938	calpain 2	Capn2	5	8.86	190	0.975	1.657	1.558
IPI00387312	phosphofructokinase; liver; B-type	Pfkl	5	6.15	189	0.933	1.326	1.256
IPI00137730	phosphatidylethanolamine binding protein 1	Pebp1	4	18.72	189	0.893	1.268	1.287
IPI00378120	glutaredoxin 5	Glrx5	3	25.66	188	1.037	1.268	1.324
IPI00850737	methylmalonyl-Coenzyme A mutase	Mut	7	12.3	187	0.967	1.252	1.252
IPI00127417	nucleoside diphosphate kinase B	Nme2	9	55.26	187	0.97	1.465	1.426
IPI00407692	ATPase; H ⁺ transporting; lysosomal V1 subunit A	Atp6v1a	2	4.21	185	1.042	1.393	1.653
IPI00126083	EH-domain containing 1	Ehd1	11	17.98	185	0.962	1.314	1.316
IPI00120719	cytochrome c oxidase; subunit Va	Cox5a	6	26.03	185	0.947	0.953	0.935
IPI00119618	calnexin	Canx	5	9.31	184	0.932	1.146	1.113
IPI00229647	talin 2	Tln2	5	2.01	182	1.065	1.385	1.353
IPI00319518	unnamed protein product	Lonp1	13	12.28	181	0.922	1.295	1.293
IPI00122442	branched chain aminotransferase 2; mitochondrial	Bcat2	7	16.54	180	0.913	1.663	1.661
IPI00466817	thymopoietin delta	Tmpo	4	13.95	179	0.876	1.327	1.117
IPI00402968	EH-domain containing 2	Ehd2	11	17.86	179	0.913	1.296	1.339
IPI00555113	ribosomal protein L18	Rpl18	4	21.81	179	0.974	1.315	1.307
IPI00124692	transaldolase 1	Taldo1	7	17.21	178	1.052	1.551	1.523
IPI00224784	prothymosin alpha	Ptma	4	13.51	177	0.862	1.959	2.174
IPI00118237	mitochondrial ribosomal protein L1 isoform 1	Mrpl1	2	6.25	177	0.852	1.341	1.396
IPI00339885	collagen; type VI; alpha 1	Col6a1	6	6.54	176	0.903	1.502	1.495
IPI00661241	Isoform 2 of 6-phosphofructokinase type C	Pfkip	6	10.08	176	1.008	1.514	1.43
IPI00662244	amylo-1;6-glucosidase; 4-alpha-glucanotransferase	Agl	14	8.68	174	0.952	1.128	1.114

IPI00229517	lectin; galactose binding; soluble 1	Lgals1	4	28.89	174	0.916	1.349	1.358
IPI00132958	acyl-CoA thioesterase 13	Acot13	4	27.14	173	0.933	1.361	1.368
IPI00170357	AFG3(ATPase family gene 3)-like 2	Afg3l2	12	15.09	173	0.924	1.164	1.17
IPI00131459	nucleoside-diphosphate kinase 1	LOC100046344	7	43.42	173	0.997	1.53	1.537
IPI00320188	Nicotinamide phosphoribosyltransferase	Nampt	10	17.11	172	0.913	1.063	1.076
IPI00125807	mannose phosphate isomerase	Mpi	6	13.95	172	0.933	1.427	1.519
IPI00131771	cytochrome c oxidase; subunit VIc	Cox6c	7	52.63	172	1.01	1.164	1.141
IPI00128857	NADP-dependent malic enzyme	Me1	3	6.29	171	0.867	1.185	1.17
IPI00129516	ubiquinol-cytochrome c reductase hinge protein	Uqcrrh	1	16.85	170	0.905	0.79	0.791
IPI00267983	mCG142036	9330129D05Rik	10	17.12	169	0.901	1.122	1.106
IPI00169862	coenzyme Q9 homolog	Coq9	7	28.12	169	0.891	1.169	1.13
IPI00270326	proteasome (prosome; macropain) 26S subunit; ATPase 2	Psmc2	6	16.42	168	0.989	1.358	1.465
IPI00115598	Estradiol 17-beta-dehydrogenase 8	H2-Ke6	5	31.54	168	0.89	1.26	1.361
IPI00224505	ribosomal protein L13	Gm15710	5	22.27	166	0.97	1.456	1.456
IPI00115432	phospholamban	Pln	8	34.62	166	0.932	1.203	1.001
IPI00128791	heat shock protein; alpha-crystallin-related; B6	Hspb6	3	20.99	166	0.938	2.757	2.783
IPI00119575	unnamed protein product	Prkar1a	6	13.53	165	0.963	1.596	1.577
IPI00553777	unnamed protein product	Hnrnpa1	5	14.75	165	0.98	1.405	1.43
IPI00122334	myozenin 2	Myoz2	4	13.64	164	0.998	1.114	1.105
IPI00135869	RAB11B; member RAS oncogene family	Rab11b	6	24.77	164	0.926	1.232	1.248
IPI00121280	glutathione S-transferase mu 7	Gstm7	9	37.16	163	0.984	1.241	1.246
IPI00274222	Isobutyryl-CoA dehydrogenase; mitochondrial	Acad8	4	11.38	163	0.875	1.156	1.209
IPI00273164	aldehyde dehydrogenase family 5; subfamily A1	Aldh5a1	7	14.53	163	1.013	1.306	1.311
IPI00379695	coenzyme Q5 homolog; methyltransferase	Coq5	3	8.87	163	0.995	1.261	1.239
IPI00121550	Na ⁺ /K ⁺ -ATPase beta 1 subunit	Atp1b1	7	20.72	162	0.935	1.152	1.138
IPI00329872	collagen; type I; alpha 1	Col1a1	3	2.48	162	1.087	2.063	1.956
IPI00319188	Lipoprotein lipase	LOC669888	2	5.7	162	0.968	1.096	1.074

IPI00331214	CD36 antigen	Cd36	8	10.81	162	1.078	1.261	1.245
IPI00222284	aldo-keto reductase family 1; member B10	2310005E 10Rik	9	25.95	161	1.048	1.393	1.454
IPI00111770	ATP synthase; H+ transporting; mitochondrial F1F0 complex; subunit e	Atp5k	7	67.61	161	0.894	1.154	1.155
IPI00117087	cell division cycle 37 homolog	Cdc37	4	10.03	161	0.979	1.494	1.526
IPI00128346	CDGSH iron sulfur domain 1	Cisd1	5	42.59	161	0.942	1.156	1.139
IPI00132478	hypothetical protein LOC67851	1700021F0 5Rik	3	9.58	160	0.8	1.452	0.354
IPI00117214	hydroxysteroid dehydrogenase like 2	Hsd12	8	18.16	159	0.931	1.184	1.195
IPI00187275	carnitine deficiency-associated gene expressed in ventricle 3 isoform a	Cdv3	3	13.56	159	0.971	1.72	1.832
IPI00624663	Alpha-2-macroglobulin	Pzp	14	9.62	159	0.917	1.265	1.271
IPI00420975	formin homology 2 domain containing 3	Fhod3	5	3.3	158	1.081	1.519	1.434
IPI00311383	Adiponectin	Adipoq	4	18.62	158	0.911	1.232	1.133
IPI00129225	kininogen 1 isoform 2	Kng1	4	8.8	157	0.994	1.691	1.644
IPI00122565	guanosine diphosphate (GDP) dissociation inhibitor 2	Gdi2	6	18.2	157	0.909	1.402	1.471
IPI00230394	lamin B1	Lmnb1	5	9.69	157	0.873	1.153	1.188
IPI00222767	pyruvate dehydrogenase complex; component X	Pdhx	5	9.58	156	0.927	1.19	1.14
IPI00134206	matrix-remodelling associated 7	Mxra7	2	16.56	156	1.306	2.18	2.031
IPI00114246	neuronal protein 15.6	Ndufb11	4	24.5	154	0.942	1.144	1.104
IPI00128249	alpha-2-HS-glycoprotein	Ahsg	7	17.97	154	0.882	1.234	1.214
IPI00230320	Carbonic anhydrase 1	Car1	2	9.96	154	0.984	1.182	1.161
IPI00137601	coiled-coil domain containing 44	Ccdc44	5	15.31	152	0.974	1.356	1.341
IPI00321499	Bcl-2-like protein 13	Bcl2l13	4	6.68	151	1.014	1.113	1.122
IPI00132722	Annexin A3	Anxa3	7	26.01	151	0.955	1.444	1.512
IPI00123494	proteasome 26S non-ATPase subunit 2	Psm2	6	8.37	149	0.979	1.398	1.513
IPI00121534	carbonic anhydrase II	Car2	5	18.46	149	0.998	1.007	1.003
IPI00310091	alpha isoform of regulatory subunit A; protein phosphatase 2	Ppp2r1a	6	13.41	149	0.931	1.368	1.418
IPI00120232	NADH dehydrogenase (ubiquinone)	Ndufs7	5	18.3	148	0.981	1.055	1.051

Fe-S protein 7								
IPI00331318	palmitoyl-protein thioesterase precursor	Ppt1	1	4.89	147	0.896	1.26	1.207
IPI00311236	ribosomal protein L7	Rpl7	5	17.78	147	0.934	1.436	1.377
IPI00111793	Nidogen-1	Nid1	5	4.9	147	0.975	1.1	1.144
IPI00123927	serine (or cysteine) proteinase inhibitor; clade A; member 1e	Serpina1e	7	11.14	147	1.043	1.251	1.205
IPI00138089	leucine rich repeat containing 47	Lrrc47	3	6.2	146	1.001	1.361	1.332
IPI00110503	sarcoglycan; gamma (dystrophin-associated glycoprotein)	Sgcg	2	7.9	146	0.923	1.143	1.087
IPI00113143	6.8 kDa mitochondrial proteolipid	2010107E04Rik	3	29.31	145	0.976	1.081	1.076
IPI00331710	Acyl-CoA dehydrogenase family member 9; mitochondrial	Acad9	5	8.16	143	0.93	1.149	1.157
IPI00308976	NADP-dependent malic enzyme; mitochondrial	Me3	5	6.79	143	0.95	1.341	1.278
IPI00876323	ATP synthase; H+ transporting; mitochondrial F0 complex; subunit G	Gm10221	6	54.37	142	0.834	1.143	1.143
IPI00308324	Radixin	Rdx	10	13.89	142	0.969	1.316	1.331
IPI00309997	four and a half LIM domains 1 isoform 3	Fhl1	7	20.71	141	0.937	3.174	3.011
IPI00453819	leucyl-tRNA synthetase	Lars	2	2.72	141	1.003	1.48	1.302
IPI00135686	peptidylprolyl isomerase B	Ppib	4	13.89	141	1.032	1.629	1.608
IPI00133034	histidine triad nucleotide binding protein 2	Hint2	3	21.47	141	0.905	1.252	1.2
IPI00112963	catenin alpha 1	Ctnna1	1	1.88	140	0.991	1.04	1.029
IPI00403586	arylacetamide deacetylase-like 1	Aadacl1	5	12.5	140	0.952	1.163	1.123
IPI00755120	ribosome binding protein 1 isoform a	Rrbp1	10	22.2	140	0.967	1.604	1.52
IPI00113196	cytochrome c oxidase; subunit VIIa 1	Cox7a1	2	28.75	140	0.983	0.962	0.96
IPI00308195	hypothetical protein LOC217830	9030617O03Rik	9	16.86	140	0.931	1.164	1.125
IPI00125512	SH3-binding domain glutamic acid-rich protein	Sh3bgr	4	13.55	139	0.873	1.021	1.156
IPI00459344	PAP associated domain containing 1	Mtpap1	1	2.22	139	1.334	1.733	1.674

IPI00130331	L-2-hydroxyglutarate dehydrogenase	L2hgdh	5	11.21	139	0.976	1.245	1.245
IPI00229453	reticulon 2 isoform C	Rtn2	2	12.25	139	1.007	0.882	0.891
IPI00266899	FK506 binding protein 1A; 12kDa	Fkbp1a	2	25	139	1.031	0.884	0.876
IPI00669522	Isoform 2 of CLIP-associating protein 1	Clasp1	5	4.19	139	1.029	1.319	1.234
IPI00322312	Rho GDP dissociation inhibitor (GDI) alpha	Arhgdia	3	18.14	139	0.991	1.751	1.723
IPI00132531	NADH dehydrogenase (ubiquinone) 1 beta subcomplex; 5	Ndufb5	3	16.93	139	0.898	1.063	1.053
IPI00117083	GrpE-like 1; mitochondrial	Grpel1	4	17.97	139	1.096	1.9	1.035
IPI00387249	family with sequence similarity 82; member B	Fam82b	5	19.67	139	0.887	1.239	1.295
IPI00111013	cathepsin D	Ctsd	6	17.8	138	0.995	1.277	1.266
IPI00132039	mitochondrial carrier homolog 2	Mtch2	5	20.13	138	0.854	1.101	0.777
IPI00467841	unnamed protein product	Calm1	4	24.37	138	0.888	0.874	0.881
IPI00123007	ribosomal protein L31	Gm10191	4	33.6	137	0.97	1.337	1.313
IPI00116170	NADH dehydrogenase subunit 3	ND3	1	13.04	137	0.986	1.385	1.187
IPI00134353	nucleolar protein 3	Nol3	1	8.64	137	0.852	1.12	0.997
IPI00341322	NADH dehydrogenase (ubiquinone) 1 beta subcomplex; 6	Ndufb6	5	34.38	136	0.907	1.16	1.145
IPI00323911	glutathione S-transferase; alpha 4	Gsta4	4	13.06	136	0.923	1.326	1.276
IPI00229865	hypothetical protein LOC104799 isoform b	AI413782	2	5.51	135	1.031	2.114	1.494
IPI00133685	AKT1 substrate 1 (proline-rich)	Akt1s1	2	11.28	135	0.899	1.358	1.725
IPI00115302	branched chain keto acid dehydrogenase E1 beta	Bckdhb	4	13.66	135	1.014	1.564	1.625
IPI00338785	laminin B1 subunit 1	Lamb1-1	9	5.02	135	0.883	1.062	0.951
IPI00274656	mitochondrial processing peptidase beta subunit	Pmpcb	5	10.63	135	0.92	1.324	1.296
IPI00122521	fragile X mental retardation-related protein 1 isoform 1	Fxr1	2	4.28	134	0.973	0.997	1.002
IPI00127085	ribosomal protein L10A	Rpl10a	6	25.35	133	0.988	1.424	1.469
IPI00121833	acetyl-Coenzyme A acyltransferase 1	Acaa1a	3	12.26	133	0.953	1.172	1.274
IPI00118676	eukaryotic translation initiation factor 4A1 isoform 1	Eif4a1	6	14.53	132	0.934	1.588	1.6
IPI00138342	Liver carboxylesterase N	Es1	8	15.52	132	0.928	1.286	1.276

IPI00114375	dihydropyrimidinase-like 2	Dpysl2	6	9.27	132	0.972	1.717	1.67
IPI00283862	proteasome (prosome; macropain) subunit; alpha type 1	Psma1	4	15.59	132	0.991	1.395	1.396
IPI00830749	Col6a3 protein	LOC674521	6	2.32	131	0.938	1.379	1.415
IPI00762636	acyl-CoA synthetase family member 3	Acsf3	3	5.15	131	0.948	1.148	1.165
IPI00109823	glucan (1;4-alpha-); branching enzyme 1	Gbe1	3	5.7	131	1.003	1.256	1.258
IPI00331644	Proteasome subunit alpha type-3	Psma3	4	19.61	131	1.002	1.607	1.547
IPI00230108	protein disulfide-isomerase A3	Pdia3	12	23.96	130	0.896	1.583	1.624
IPI00318935	SRA stem-loop-interacting RNA-binding protein; mitochondrial	1810035L17Rik	3	26.79	130	0.923	1.325	1.286
IPI00130343	unnamed protein product	Hnrnpc	6	16.77	130	0.986	1.273	1.252
IPI00313998	Sulfide:quinone oxidoreductase; mitochondrial	Sqrdl	3	7.56	129	0.994	1.173	1.266
IPI00122127	RNA binding protein gene with multiple splicing isoform 2	Rbpms	1	7.61	129	1.005	1.106	1.25
IPI00315463	receptor accessory protein 5	Reep5	4	19.58	129	0.951	1.12	1.093
IPI00113869	basigin isoform 2	Bsg	6	27.84	129	0.944	1.078	1.097
IPI00877291	annexin A4	Anxa4	6	20.38	128	0.929	1.544	1.571
IPI00109709	PYD and CARD domain containing	Pycard	2	14.51	128	0.96	1.519	1.523
IPI00133713	D-tyrosyl-tRNA deacylase 1	Dtd1	2	13.88	128	0.938	1.152	1.1
IPI00331092	ribosomal protein S4; X-linked	Rps4x	8	26.62	128	0.925	1.517	1.505
IPI00129907	Golgi resident protein GCP60	Acbd3	2	3.81	127	1.056	1.624	1.56
IPI00465585	transforming; acidic coiled-coil containing protein 2 isoform c	Tacc2	6	2.57	127	1.046	1.584	1.573
IPI00122743	Aspartyl-tRNA synthetase; cytoplasmic	Dars	5	10.78	127	0.856	1.316	1.312
IPI00222496	protein disulfide isomerase A6	Pdia6	4	11.69	127	0.924	1.885	0.93
IPI00123223	murinoglobulin 1	Mug1	4	2.51	127	0.905	1	0.962
IPI00225634	ribosomal protein S12	Gm15887	4	31.82	126	0.964	1.459	1.415
IPI00223217	ribosomal protein L13A	Rpl13a	7	23.15	126	0.901	1.317	1.278
IPI00331163	S-phase kinase-associated protein 1A	Skp1a	3	20.86	125	0.945	1.349	1.318
IPI00123802	heat shock 105kD	Hsph1	1	1.63	125	1.055	1.35	1.495
IPI00115663	Dynactin subunit 1	Dctn1	3	2.11	125	0.969	1.486	1.478
IPI00118875	eukaryotic translation elongation	Eef1d	4	6.97	125	0.94	1.313	1.244

	factor 1 delta isoform a							
IPI00221613	ADP-ribosylation factor 1	Arf1	4	22.1	125	1.004	1.408	1.456
IPI00109213	Sodium/calcium exchanger 1	Slc8a1	3	3.92	125	0.85	1.273	1.169
IPI00123276	MOCO sulphurase C-terminal domain containing 2	Mosc2	4	11.24	124	0.97	1.385	1.354
IPI00113584	microtubule-associated protein tau	Mapt	8	11.6	124	0.893	1.242	1.246
IPI00137424	Evolutionarily conserved signaling intermediate in Toll pathway; mitochondrial	Ecsit	2	6.44	124	0.827	1.076	0.934
IPI00137787	ribosomal protein L8	Rpl8	5	19.07	124	0.961	1.437	1.413
IPI00378438	tensin 1	Tns1	9	6.46	123	1.006	1.281	1.333
IPI00120870	periostin; osteoblast specific factor	Postn	2	3.7	123	0.899	3.311	3.06
IPI00109612	laminin; beta 2	Lamb2	7	4.89	122	0.952	1.127	1.012
IPI00126133	RAS-like; family 2; locus 9	Rasl2-9	1	6.02	121	1.028	1.657	1.377
IPI00222526	coenzyme Q6 homolog (yeast); isoform CRA_c	Coq6	3	6.09	121	0.907	1.047	1.075
IPI00230139	FK506 binding protein 52	Fkbp4	6	14.85	121	0.938	1.23	1.183
IPI00122450	caldesmon 1	Cald1	3	6.42	121	0.974	1.773	1.553
IPI00111181	vacuolar protein sorting 35	Vps35	6	8.54	120	1.007	1.204	1.286
IPI00408892	RAB7; member RAS oncogene family	Rab7	2	9.66	120	0.996	1.247	1.183
IPI00323822	related RAS viral (r-ras) oncogene homolog 2	Rras2	3	17.16	120	0.95	1.312	1.264
IPI00121514	stress-induced phosphoprotein 1	Stip1	9	16.21	120	0.942	1.403	1.324
IPI00322931	unnamed protein product	Peci	4	8.99	119	1.124	1.455	1.403
IPI00131406	proteasome (prosome; macropain) subunit; alpha type 7	Psma7	2	9.27	119	0.982	1.305	1.486
IPI00165796	glutathione S-transferase mu 4 isoform 1	Gstm4	8	30.28	119	0.974	1.23	1.206
IPI00110760	DnaJ (Hsp40) homolog; subfamily B; member 4	Dnajb4	2	8.01	119	1.01	1.7	1.605
IPI00113517	cathepsin B preproprotein	Ctsb	3	7.67	119	0.867	1.56	1.453
IPI00113214	ubiquitin specific peptidase 5	Usp5	5	6.76	119	0.928	1.402	1.448
IPI00132096	5'-methylthioadenosine phosphorylase	Mtap	2	9.89	118	0.973	1.476	1.503
IPI00380814	target of myb1 homolog isoform 1	Gm5884	3	8.33	118	1.057	1.545	1.803
IPI00279010	Bcam protein	Bcam	4	6.77	118	0.917	1.225	1.243
IPI00400432	eukaryotic translation initiation	Eif4a2	5	12.53	118	0.968	1.281	1.273

	factor 4A2 isoform a							
IPI00118678	T-complex protein 1 subunit alpha A	Tcp1	4	7.73	118	0.891	1.367	1.327
IPI00135640	protease (prosome; macropain) 26S subunit; ATPase 5	Psmc5	2	6.16	118	0.913	1.53	1.615
IPI00126940	adenosine kinase	Adk	5	13.3	118	1.011	1.355	1.359
IPI00121576	Apolipoprotein O	Apoo	3	15.09	118	0.927	1.041	1.032
IPI00227930	histone cluster 1; H2bh	Hist1h2bh	8	46.03	117	0.929	1.304	1.287
IPI00134202	PREDICTED: similar to ribosomal protein L24	Gm9385	4	37.5	117	0.849	1.288	1.389
IPI00126184	group specific component	Gc	7	12.61	117	0.961	1.325	1.361
IPI00172364	poly(A) binding protein; cytoplasmic 4 isoform 2	Pabpc4	5	9.27	116	0.92	1.269	1.283
IPI00117556	Heat shock protein beta-7	Hspb7	3	23.08	116	0.945	2.203	2.174
IPI00111045	translocase of inner mitochondrial membrane 50 homolog	Timm50	3	9.92	116	0.97	1.222	1.308
IPI00109169	isocitrate dehydrogenase 3 (NAD+); gamma	Idh3g	7	15.01	115	1.018	1.385	1.334
IPI00626662	aldehyde dehydrogenase 1A1	Aldh1a1	2	3.39	115	0.884	1.075	1.061
IPI00315908	mitochondrial protein 18 kDa	1700020C11Rik	3	21.08	115	0.936	0.946	1.03
IPI00350458	Protein unc-45 homolog B	Unc45b	8	9.02	115	0.941	1.2	1.173
IPI00134135	acid phosphatase 1; soluble isoform 2	LOC631286	2	17.09	114	1.017	1.274	1.182
IPI00322562	ribosomal protein S14	Rps14	4	29.14	114	0.96	1.513	1.615
IPI00323179	guanosine diphosphate (GDP) dissociation inhibitor 1	Gdi1	6	18.12	114	0.882	1.201	1.261
IPI00136119	kelch repeat and BTB (POZ) domain containing 10	Kbtbd10	8	10.89	114	0.968	1.611	1.561
IPI00162942	mitochondrial ribosomal protein L37	Mrpl37	1	3.78	114	1.005	1.345	1.356
IPI00131584	carnitine/acylcarnitine translocase	Slc25a20	8	19.6	114	0.925	1.131	1.082
IPI00132504	mitochondrial ribosomal protein S30	Mrps30	1	2.49	114	1.179	1.722	1.427
IPI00122633	acyl-CoA synthetase family member 2	Acsf2	2	4.23	113	0.755	1.3	1.239
IPI00116302	eukaryotic translation initiation factor 2; subunit 2 (beta)	Eif2s2	2	6.34	113	0.932	1.238	1.17
IPI00319270	mannose-6-phosphate receptor	M6prbp1	4	11.9	113	0.943	1.264	1.289

	binding protein 1								
IPI00230283	G elongation factor; mitochondrial 1	Gfm1	4	5.99	112	0.872	1.15	1.196	
IPI00132728	cytochrome c-1	Cyc1	7	25.23	111	0.97	1.12	1.154	
IPI00467124	hexaprenyldihydroxybenzoate methyltransferase	Coq3	3	12.43	111	1.033	1.123	1.126	
IPI00624653	upregulated during skeletal muscle growth 5	Usmg5	3	44.83	111	0.926	1.136	1.152	
IPI00315879	CNDP dipeptidase 2	Cndp2	4	12.42	111	1.021	1.656	1.53	
IPI00169448	ubiquitin-conjugating enzyme E2M	Ube2m	4	19.13	110	0.953	1.626	1.636	
IPI00119853	GNAS complex locus GNASL	Gnas	3	8.63	110	0.801	1.099	1.118	
IPI00130095	ras-GTPase-activating protein SH3-domain binding protein	G3bp1	3	6.02	110	1.057	1.846	0.693	
IPI00227900	Isoform 2 of cAMP-dependent protein kinase catalytic subunit alpha	Prkaca	4	11.37	110	0.898	1.216	1.18	
IPI00132474	integrin beta 1 (fibronectin receptor beta)	Itgb1	4	4.64	110	0.944	1.42	1.307	
IPI00117829	caveolin 1; caveolae protein	Cav1	3	12.36	110	0.98	1.196	1.223	
IPI00380281	splicing factor 3a; subunit 2	Sf3a2	1	2.89	110	1.342	1.632	1.693	
IPI00117288	heterogeneous nuclear ribonucleoprotein A/B isoform 2	Hnrnpab	4	14.74	109	0.948	1.389	1.42	
IPI00117167	gelsolin	Gsn	5	5.9	109	1.023	1.424	1.373	
IPI00125592	demethyl-Q 7	Coq7	4	14.29	109	1.009	1.065	0.971	
IPI00136642	serpin peptidase inhibitor; clade C; member 1	Serpinc1	4	7.1	109	0.94	1.527	1.433	
IPI00312720	methylmalonic aciduria type A	Mmaa	5	12.53	109	0.917	1.162	1.159	
IPI00469918	Rps16 protein	LOC100039355	4	23.26	109	0.948	1.549	1.499	
IPI00129959	SEC8	Exoc4	2	2.56	109	0.831	2.151	2.01	
IPI00322911	sarcoglycan; alpha isoform 1	Sgca	3	9.56	108	0.981	1.104	1.088	
IPI00454016	methionine adenosyltransferase II; alpha	Mat2a	2	6.58	108	0.941	1.514	1.481	
IPI00653381	PDZ and LIM domain 5 isoform ENH1	Pdlim5	5	11.34	108	0.869	1.174	1.041	
IPI00317710	heat shock protein 4 like	Hspa4l	4	5.37	108	0.923	1.383	1.3	
IPI00223446	laminin; alpha 4	Lama4	3	2.09	108	1.049	1.833	1.598	
IPI00319933	protein kinase C and casein kinase substrate in neurons 3	Pacsin3	5	11.32	107	0.736	1.247	1.321	

IPI00330303	5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase	LOC100046995	5	11.82	107	1.137	1.246	1.31
IPI00108143	heterogeneous nuclear ribonucleoprotein H2	Hnrnph2	4	10.47	107	1.087	1.296	1.374
IPI00120248	small muscle protein; X-linked	Smpx	1	20	107	0.984	1.36	1.34
IPI00458043	Isoform 2 of Sorbin and SH3 domain-containing protein 1	Sorbs1	5	9.05	107	0.799	1.331	0.419
IPI00457501	interferon gamma induced GTPase	Igtp	1	4.02	107	0.967	1.596	1.605
IPI00137409	transketolase	Tkt	3	7.22	107	1.051	1.806	1.895
IPI00321190	prosaposin isoform B preproprotein	Psap	4	7.18	106	0.897	0.995	0.988
IPI00127050	inorganic pyrophosphatase 2	Ppa2	5	13.64	106	0.905	1.301	1.323
IPI00109501	mitochondrial ribosome recycling factor	Mrrf	4	17.94	106	0.911	1.121	1.094
IPI00230145	ferritin heavy chain 1	Fth1	6	27.47	106	0.994	0.904	0.966
IPI00225747	hypothetical protein LOC76916	4930455C21Rik	2	6.32	106	1.036	1.128	1.101
IPI00466200	FUN14 domain-containing protein 2	Fundc2	2	13.25	105	0.842	1.008	1.012
IPI00671847	Ppp1r12a protein	Ppp1r12a	2	2.53	104	0.864	1.601	1.514
IPI00117300	NADH dehydrogenase (ubiquinone) Fe-S protein 5	Ndufs5	4	36.79	104	1.014	1.147	1.146
IPI00128570	thiamine triphosphatase	Thtpa	1	7.14	104	1.329	1.165	1.411
IPI00134599	ribosomal protein S3	Rps3	6	21.81	104	1.012	1.696	1.681
IPI00111166	haloacid dehalogenase-like hydrolase domain containing 2 isoform 1	Hdhd2	2	8.11	104	0.927	1.335	1.304
IPI00108189	histidine triad nucleotide binding protein 1	Hint1	3	23.02	104	0.896	1.248	1.166
IPI00755161	oxysterol binding protein	Osbp	2	5.22	104	1.113	1.732	0.249
IPI00269076	adenylate kinase 2 isoform b	Ak2	5	21.55	104	0.909	0.994	1.003
IPI00896727	TBP-interacting protein	Cand1	4	3.5	103	0.787	1.108	1.232
IPI00125901	ribosomal protein S13	LOC100048340	6	40.4	103	0.998	1.255	1.314
IPI00321734	glyoxalase 1	Glo1	4	16.85	103	0.906	1.071	1.117
IPI00118495	SET and MYND domain containing 1 isoform 1	Smyd1	4	4.29	103	0.924	1.011	1.089
IPI00316740	damage specific DNA binding	Ddb1	2	1.67	103	0.991	1.569	1.379

IPI00222546	protein 1 ribosomal protein L22	mCG_130059	3	26.56	103	0.854	1.485	1.448
IPI00226687	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; assembly factor 1	Ndutf1	2	6.67	102	1.037	1.184	1.169
IPI00309035	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit 1	Rpn1	4	5.92	102	0.928	1.521	1.498
IPI00420734	mitochondrial fission factor	Mff	2	9.97	102	1.019	1.062	0.836
IPI00222037	Isoform 1 of Melanoma inhibitory activity protein 3	Mia3	3	1.61	102	0.914	1.436	1.443
IPI00816946	Gphn protein	Gphn	1	1.81	101	0.955	1.233	1.636
IPI00896734	Y box protein 2	Ybx2	4	21.17	101	0.991	0.95	1.132
IPI00131896	brain protein 44	Brp44	2	13.39	101	0.984	1.26	1.173
IPI00319111	succinate dehydrogenase complex; subunit C; integral membrane protein	Sdhc	3	19.53	100	0.897	1.099	1.154
IPI00672046	unnamed protein product	Ttc38	1	3.23	100	0.87	1.323	1.169
IPI00309481	Band 4.1-like protein 2	Epb4.1l2	6	6.48	100	0.978	1.431	1.413
IPI00265705	novel protein (B230120H23Rik)	B230120H23Rik	2	5.95	100	1.026	1.816	1.67
IPI00117178	aryl-hydrocarbon receptor-interacting protein	Aip	1	4.24	100	1.024	1.547	1.439
IPI00170093	NADH dehydrogenase ubiquinone Fe-S 8	Ndufs8	8	32.08	100	0.92	1.097	1.068
IPI00110385	hypothetical protein LOC66359	2310005N03Rik	2	22.22	99	0.937	1.054	1.114
IPI00331461	ribosomal protein L11	Rpl11	2	11.8	99	0.937	1.425	1.445
IPI00133102	GTP-binding protein RAD	Rrad	1	6.17	99	0.833	1.345	1.456
IPI00131228	phosphomannomutase 2	Pmm2	3	11.98	99	1.059	1.271	1.407
IPI00453998	ankyrin repeat domain 1 (cardiac muscle)	Ankrd1	2	6.9	99	1.131	4.221	4.644
IPI00269661	heterogeneous nuclear ribonucleoprotein A3 isoform a	Hnrnpa3	5	14.25	99	1.057	1.595	1.575
IPI00229475	junction plakoglobin	Jup	4	7.92	99	0.928	1.122	1.137
IPI00115636	cAMP-dependent protein kinase inhibitor gamma	Pkig	2	40.79	99	0.81	0.949	0.929

IPI00132696	aarF domain containing kinase 1	Adck1	2	5.71	98	1.132	1.285	1.31
IPI00626994	importin 5	Ipo5	2	1.73	98	0.911	1.6	1.636
IPI00124829	actin related protein 2/3 complex; subunit 3	Arpc3	3	14.61	98	1.199	1.561	1.389
IPI00125454	heat shock protein; DNAJ-like 4	Dnaja4	4	8.56	98	1.205	1.932	1.871
IPI00114368	SEC22 vesicle trafficking protein-like 1	Sec22b	2	12.56	98	1.082	1.509	1.341
IPI00454201	kynurenine aminotransferase III	Ccbl2	2	4.76	98	0.983	1.34	1.367
IPI00125442	myocyte induction differentiation originator	Alpk3	1	0.71	98	0.862	1.641	1.863
IPI00153381	ubiquinol-cytochrome c reductase complex protein	1110020P15Rik	2	37.5	98	0.922	1.098	1.1
IPI00230395	annexin A1	Anxa1	4	13.01	98	1.017	2.05	2.103
IPI00130185	protein phosphatase 1; catalytic subunit; alpha	Ppp1ca	4	12.42	98	0.98	1.407	1.38
IPI00169916	clathrin; heavy polypeptide (Hc)	Cltc	12	7.64	97	0.943	1.432	1.441
IPI00882349	22 kDa protein	Hdgf	3	18.32	97	1.074	1.645	1.64
IPI00885509	Methylthioribose-1-phosphate isomerase	Mri1	2	5.42	97	0.873	1.206	1.264
IPI00114560	RAB1; member RAS oncogene family	Rab1	3	17.56	97	0.869	1.237	1.307
IPI00113052	Ts translation elongation factor; mitochondrial	Tsfn	3	12.35	97	1.131	1.193	1.394
IPI00407425	Isoform 2 of Myosin-XVIIIa	Myo18a	2	1.45	97	0.745	1.443	1.346
IPI00115094	branched chain ketoacid dehydrogenase kinase	Bckdk	1	2.67	97	0.967	1.176	1.088
IPI00119576	threonine aldolase 1	Tha1	1	3.5	96	0.948	1.447	1.409
IPI00119755	nudix (nucleoside diphosphate linked moiety X)-type motif 7; isoform CRA_a	Nudt7	2	8.85	96	0.954	1.112	1.031
IPI00321617	epoxide hydrolase 2; cytoplasmic	Ephx2	6	10.83	96	0.872	1.175	1.147
IPI00127983	transmembrane emp24 domain trafficking protein 2	Gm10698	1	4.48	96	1.029	1.572	1.442
IPI00330958	heterogeneous nuclear ribonucleoprotein D isoform a	Hnrnpd	3	8.17	96	1.203	1.589	1.65
IPI00122312	unnamed protein product	Fgg	5	12.19	96	0.99	1.518	1.509
IPI00230133	histone cluster 1; H1b	Hist1h1b	4	16.59	96	0.908	1.669	1.641
IPI00323230	spectrin alpha 1	Spna1	5	2.24	95	0.899	1.285	1.212

IPI00118447	purine rich element binding protein A	LOC100045958	3	12.15	95	0.972	1.179	1.168
IPI00314191	carbonyl reductase 1	Cbr1	5	15.52	95	0.955	1.24	1.224
IPI00111556	protein phosphatase 2a; catalytic subunit; beta isoform	Ppp2cb	3	9.06	95	0.957	1.433	1.396
IPI00114377	cytochrome c oxidase; subunit VIIa 2	Cox7a2	1	12.05	95	0.931	1.168	1.163
IPI00131138	Filamin-A	Flna	8	3.21	94	0.95	1.737	1.77
IPI00116228	peptidylprolyl isomerase F	Ppif	6	20.87	94	1.043	1.031	1.017
IPI00116277	chaperonin containing Tcp1; subunit 4 (delta)	Cct4	8	15.21	94	0.972	1.687	1.528
IPI00322096	Multifunctional protein ADE2	Paics	5	11.53	94	0.946	1.332	1.385
IPI00266281	thioredoxin-like 1	Txn1	2	10.03	94	0.92	1.46	1.397
IPI00121051	glutathione S-transferase kappa 1	Gstk1	9	42.92	93	0.925	1.145	1.135
IPI00225312	methionine-R-sulfoxide reductase B3	MsrB3	3	16.67	93	0.897	1.597	1.52
IPI00118736	protein phosphatase 1B isoform 1	Ppm1b	1	2.52	93	1.107	1.885	2.181
IPI00284925	coiled-coil-helix-coiled-coil-helix domain containing 2	Chchd2	1	15.03	93	1.057	2.268	0.16
IPI00321647	eukaryotic translation initiation factor 3; subunit C	Eif3c	3	4.39	93	0.947	1.227	1.213
IPI00130118	RAB10; member RAS oncogene family	Rab10	3	15	92	0.913	1.279	1.246
IPI00556827	plasma membrane calcium ATPase 1	Atp2b1	1	1.31	92	0.797	0.966	1.107
IPI00271440	synuclein; gamma	Sncg	2	20.33	92	0.875	1.289	1.294
IPI00111412	ribosomal protein L4	Rpl4	6	12.89	92	1.107	1.573	1.547
IPI00114162	fatty acid binding protein 5; epidermal	Fabp5	2	13.33	92	0.976	2.092	2.047
IPI00314748	WD repeat domain 1	Wdr1	10	15.84	92	0.88	1.718	1.665
IPI00622780	cytoplasmic aconitase	Aco1	5	5.23	92	0.877	1.308	1.228
IPI00474904	aspartate-beta-hydroxylase	Asph	2	3.8	91	0.809	1.503	1.496
IPI00230730	histone cluster 1; H3c	Hist2h3b	6	32.35	91	0.92	1.411	1.407
IPI00266188	cofilin 2; muscle	Cfl2	4	28.31	91	0.864	1.736	1.682
IPI00229040	retinol dehydrogenase 13 (all-trans and 9-cis)	Rdh13	1	3.89	91	0.88	0.985	1.09
IPI00223047	cytoskeleton-associated protein 4	Ckap4	5	10.09	91	0.953	2.187	2.001
IPI00112377	alcohol dehydrogenase PAN2	Rdh14	3	10.18	91	0.977	1.156	1.21

IPI00270877	ubiquitin specific protease 14 isoform 1	Usp14	5	9.94	91	0.975	1.387	1.346
IPI00226140	monoamine oxidase B	Maob	6	10.19	91	1.002	1.072	1.093
IPI00113386	ETHE1 protein	Ethe1	1	5.51	90	0.91	1.106	1.085
IPI00223767	pantothenate kinase 4	Pank4	3	3.1	90	1.019	1.475	1.417
IPI00114833	Wolfram syndrome 1 protein homolog	Wfs1	1	1.24	90	1.036	1.298	1.477
IPI00229539	histone cluster 3; H2bb	Hist3h2bb	5	26.62	90	0.904	1.27	1.245
IPI00177038	actin-related protein 2	Actr2	3	8.88	90	0.919	1.12	1.08
IPI00322440	ubiquitin-conjugating enzyme E2-25K	Ube2k	2	10.5	90	0.892	1.326	1.367
IPI00121218	Fumarylacetoacetate hydrolase domain-containing protein 2A	Fahd2a	3	7.67	90	0.85	1.094	1.076
IPI00387337	basic leucine zipper and W2 domains 2	Bzw2	4	7.88	90	0.948	1.191	1.182
IPI00122251	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 2; mitochondrial	Pdk2	5	12.04	90	0.907	1.071	1.12
IPI00127625	Hydroxymethylglutaryl-CoA lyase; mitochondrial	Hmgcl	2	5.23	90	0.926	1.444	1.33
IPI00114710	unnamed protein product	Pcx	5	4.75	90	0.934	1.175	1.213
IPI00122075	mitochondrial antiviral signaling protein	Mavs	2	6.16	90	0.827	0.963	1.117
IPI00116281	chaperonin containing Tcp1; subunit 6a	Cct6a	4	7.34	90	0.992	1.412	1.425
IPI00134131	sterol carrier protein 2; liver	Scp2	4	6.22	89	0.916	1.054	1.052
IPI00405611	solute carrier family 12; member 7; isoform CRA_a	Slc12a7	2	5.11	89	0.862	1.183	1.189
IPI00222447	transmembrane protein 11	Tmem11	1	4.21	89	0.988	1.231	1.147
IPI00313222	ribosomal protein L6	Rpl6	8	23.65	89	0.864	1.43	1.391
IPI00387232	p47 protein	Nsfl1c	4	12.63	89	0.942	1.484	1.478
IPI00122529	Aminopeptidase B	Rnpep	1	1.85	89	0.931	1.767	1.511
IPI00323483	Isoform 3 of Programmed cell death 6-interacting protein	Pdcd6ip	4	4.23	89	0.922	1.607	1.57
IPI00132390	NADH dehydrogenase 1 beta subcomplex 4	Gm3873	4	31.01	88	0.947	1.195	1.209
IPI00845596	myeloid/lymphoid or mixed lineage-leukemia translocation to 4	Mllt4	3	1.76	88	0.973	1.294	1.543

	homolog								
IPI00130381	HLA-B-associated transcript 3	Bat3	3	3.47	88	0.825	1.147	1.187	
IPI00112448	ribosomal protein S10	Rps10	3	14.55	88	0.827	1.323	1.301	
IPI00354819	myosin; light polypeptide 6; alkali; smooth muscle and non-muscle	Myl6	4	30.46	88	0.993	1.716	1.902	
IPI00134484	translocase of inner mitochondrial membrane 9 homolog	Timm13	2	26.32	88	0.801	0.872	0.779	
IPI00127227	Carbonyl reductase 4	Cbr4	5	28.39	88	0.958	1.274	1.307	
IPI00130353	Valyl-tRNA synthetase	Vars	3	2.85	88	1.108	1.565	1.63	
IPI00230422	B-cell receptor-associated protein 31	Bcap31	2	7.76	88	1.046	1.507	1.518	
IPI00130530	glyoxylate reductase/hydroxypyruvate reductase	Grhpr	6	19.51	87	0.866	1.281	1.21	
IPI00331490	Aflatoxin B1 aldehyde reductase member 2	Akr7a5	2	7.36	87	0.895	1.043	1.061	
IPI00331444	importin 7	Ipo7	1	1.64	87	1.098	2.178	1.736	
IPI00131988	mitochondrial ribosomal protein L49	Mrpl49	2	15.66	87	1.008	1.307	1.268	
IPI00165799	UBX domain-containing protein 4	Ubxn4	2	3.75	87	1.088	1.687	1.64	
IPI00467796	PREDICTED: similar to G protein pathway suppressor 1	Gm9816	3	6.16	87	1.119	1.719	1.59	
IPI00648141	glycogen synthase kinase 3 alpha	Gsk3a	3	11.63	87	1.213	1.396	1.543	
IPI00331175	solute carrier family 12; member 7	Slc12a7	6	6.65	86	0.94	1.225	1.268	
IPI00272401	Acylphosphatase-2	Acyp2	3	27.84	86	0.99	1.151	1.142	
IPI00121346	muscle specific protein	Txlnb	5	11.24	86	1.018	1.226	1.251	
IPI00330688	mitochondrial ribosomal protein S7	Mrps7	1	4.96	86	0.852	1.052	1.12	
IPI00137173	mitochondrial carrier homolog 1	Mtch1	1	2.57	86	0.866	1.103	1.073	
IPI00113845	proteasome (prosome; macropain) subunit; beta type 1	Psmb1	3	13.33	86	0.919	1.351	1.306	
IPI00228617	Guanine nucleotide-binding protein G(i); alpha-2 subunit	Gnai2	3	10.14	86	0.954	1.174	1.24	
IPI00320420	clusterin	Clu	2	4.69	86	1.041	1.518	1.498	
IPI00122862	methylenetetrahydrofolate dehydrogenase 1	Mthfd1	4	3.96	85	1.087	1.421	1.482	
IPI00127989	prostaglandin-E synthase 3	LOC10004 8119	3	17.5	85	1.13	1.84	1.624	
IPI00116308	suppression of tumorigenicity 13	St13	3	7.82	85	0.846	1.193	1.208	
IPI00109505	muscle-related coiled-coil protein	Murc	3	9.67	85	0.939	1.523	1.345	

IPI00119871	Ank1 protein	Ank1	4	1.89	85	1.041	1.057	1.078
IPI00380339	Immature colon carcinoma transcript 1 protein	Ict1	2	11.17	84	1.192	1.756	1.709
IPI00464317	glutaminase isoform 1	Gls	3	6.08	84	0.995	1.478	1.454
IPI00132080	6-phosphogluconolactonase	Pgl	6	29.18	84	0.898	1.398	1.346
IPI00315948	tubulin folding cofactor B	Tbcb	2	8.2	84	1.032	1.548	1.572
IPI00153400	H2A histone family; member J	H2afj	3	27.13	84	0.986	1.328	1.246
IPI00125776	translocase of inner mitochondrial membrane 8 homolog a	Gm9797	2	22.68	83	0.925	0.951	0.923
IPI00308446	S-adenosylhomocysteine hydrolase-like 2	Ahcyl2	2	4.89	83	1.286	1.799	1.661
IPI00387289	carboxylesterase 3	Ces3	5	7.96	83	0.981	1.079	1.127
IPI00467374	unnamed protein product	Pdlm5	5	25.23	83	0.982	1.171	1.068
IPI00131376	spectrin beta 1	Spnb1	8	3.74	83	1.049	1.135	1.121
IPI00133032	coiled-coil domain containing 43	Ccdc43	1	6.31	82	0.638	0.946	1.051
IPI00135655	Vesicle-associated membrane protein-associated protein B	Vapb	4	18.93	82	0.916	1.024	0.923
IPI00308217	Adenylosuccinate lyase	Adsl	6	11.78	82	0.926	1.516	1.481
IPI00130535	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex; mitochondrial	Dbt	9	20.54	82	0.978	1.095	1.146
IPI00118929	Immunoglobulin-binding protein 1	Igbp1	1	3.53	82	0.806	1.37	1.554
IPI00126000	FK506 binding protein 3; 25kDa	Fkbp3	4	19.64	82	1.001	1.348	1.363
IPI00230241	ATP synthase; H+ transporting; mitochondrial F1 complex; epsilon subunit	Atp5e	3	42.31	82	1.111	1.377	1.354
IPI00321646	Proteasome-associated protein ECM29 homolog	AI314180	3	1.79	82	0.982	1.458	1.32
IPI00314141	Serine protease inhibitor A3N	Serpina3n	4	8.61	82	0.974	0.959	1.05
IPI00121341	thioredoxin-related transmembrane protein 1	Tmx1	3	11.15	82	0.976	1.085	1.141
IPI00177047	Sorbs2 protein	Sorbs2	6	7.98	82	1.016	2.149	2.116
IPI00270788	hypothetical protein LOC433771	2310028O11Rik	1	10.53	82	0.883	1.003	1.037
IPI00169473	5-oxoprolinase (ATP-hydrolysing)	Oplah	4	3.65	81	0.782	1.015	1.125
IPI00118821	platelet-activating factor acetylhydrolase; isoform Ib; beta	Pafah1b2	2	6.55	81	1.04	1.554	1.556

	subunit								
IPI00318778	Calcium-binding protein 39	Cab39	3	8.5	81	1.054	1.443	1.504	
IPI00320238	cytochrome c oxidase subunit VIa polypeptide 2 precursor	Cox6a2	1	12.37	81	1.032	1.028	0.988	
IPI00265701	NLR family member X1	Nlr1	1	1.13	81	0.988	1.129	1.168	
IPI00112227	transmembrane protein 126A	Tmem126a	3	15.82	81	0.912	1.13	1.088	
IPI00453499	mitochondrial isoleucine tRNA synthetase	lars2	7	7.61	80	0.838	1.206	1.074	
IPI00116138	histidyl-tRNA synthetase-like	Hars2	4	7.52	80	0.851	1.251	1.382	
IPI00396797	DEAD box polypeptide 17 isoform 4	Ddx17	2	3.38	80	0.974	1.288	1.295	
IPI00672367	coenzyme Q10 homolog A	Coq10a	3	11.2	80	0.915	1.063	1.048	
IPI00109813	heterogeneous nuclear ribonucleoprotein A0	Hnrnpa0	2	5.9	80	1.015	1.58	1.551	
IPI00112072	histocompatibility 13 isoform 2	H13	1	2.65	80	0.832	1.664	1.347	
IPI00135042	Dystrobrevin alpha	Dtna	4	6.43	80	1.02	1.179	1.133	
IPI00113798	synaptosomal-associated protein 23	Snap23	1	5.88	79	0.998	1.339	1.339	
IPI00406213	PREDICTED: similar to Chain L; Structural Basis Of Antigen Mimicry In A Clinically Relevant Melanoma Antigen System isoform 1	LOC100047628	1	3.36	79	0.85	2.347	2.375	
IPI00624098	syntaxin binding protein 3	Stxbp3a	2	3.38	79	1.17	1.374	1.438	
IPI00123744	cystatin C	Cst3	1	11.43	79	0.957	1.259	0.974	
IPI00377351	Apolipoprotein A-IV	Apoa4	6	17.97	79	0.918	1.239	1.255	
IPI00331345	40S ribosomal protein S3a	Rps3a	8	29.55	79	0.922	1.231	1.201	
IPI00311020	Sarcospan	Sspn	1	4.63	79	1.037	1.253	1.198	
IPI00230185	glycerol-3-phosphate dehydrogenase 1 (soluble)	Gpd1	4	11.46	79	0.98	1.249	1.283	
IPI00132194	small inducible cytokine subfamily E; member 1	Aimp1	2	9.09	78	1.127	1.457	1.509	
IPI00229859	Eif3b protein	Eif3b	4	5.36	78	0.959	1.469	1.307	
IPI00126042	RAB14; member RAS oncogene family	Rab14	2	10.23	78	0.974	1.224	1.212	
IPI00169851	Putative uncharacterized protein	Ablim1	3	4.34	78	0.959	1.196	1.045	
IPI00230013	calcium channel; voltage-dependent; alpha2/delta subunit 1 isoform e	Cacna2d1	4	4.24	78	0.983	1.161	1.122	
IPI00123349	SEC23A	Sec23a	3	4.58	78	0.946	1.478	1.227	

IPI00227730	NHL repeat containing 2	Nhlrc2	2	2.76	77	1.004	1.437	1.482
IPI00311072	nitrogen fixation gene; yeast homolog 1	Nfs1	3	5.88	77	0.908	1.233	1.294
IPI00608020	ferritin light chain 1	EG666673	2	16.39	77	1.105	1.441	1.459
IPI00133167	mitochondria-associated granulocyte macrophage CSF signaling molecule	Gm9803	2	16	77	0.907	1.152	1.089
IPI00318283	enoyl Coenzyme A hydratase domain containing 3	Echdc3	4	14	77	0.89	1.202	1.179
IPI00330551	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex; assembly factor 2	Ndufaf2	1	6.55	77	0.859	1.182	1.034
IPI00118924	serine (or cysteine) proteinase inhibitor; clade F; member 2	Serpinf2	1	2.85	76	0.803	1.366	1.311
IPI00113996	biliverdin reductase B (flavin reductase (NADPH))	Blvrb	3	13.11	76	0.911	1.101	1.115
IPI00112223	EF-hand domain-containing protein D2	Efhd2	2	10.42	76	0.872	2.021	1.89
IPI00113241	ribosomal protein S19	Rps19	2	11.03	76	1.061	1.689	1.661
IPI00119806	eukaryotic translation initiation factor 2A	Eif2a	1	2.41	76	0.998	1.172	1.31
IPI00122174	PREDICTED: scaffold attachment factor B	Safb	2	2.56	76	0.911	1.238	1.263
IPI00230264	H2A histone family; member X	H2afx	3	16.78	76	0.943	1.269	1.25
IPI00317590	ribosomal protein S18	Rps18	3	16.45	76	0.906	1.555	1.522
IPI00124513	LIM and cysteine-rich domains 1	Lmcd1	2	7.12	76	0.916	1.339	1.267
IPI00131366	Keratin; type II cytoskeletal 6B	Krt6b	1	2.14	76	1.024	1.082	1.055
IPI00125510	zinc finger protein 207 isoform 1	Zfp207	1	2.63	76	0.91	1.528	1.495
IPI00313884	podocalyxin-like	Podxl	3	4.77	76	0.988	1.143	1.203
IPI00121276	trans-2-enoyl-CoA reductase; mitochondrial precursor	Mecr	1	3.75	75	1.038	1.122	1.069
IPI00331155	adhesion regulating molecule 1	Adrm1	1	3.93	75	0.999	2.221	1.747
IPI00331111	cysteine conjugate-beta lyase 1	Ccbl1	1	1.89	75	1.02	1.206	1.333
IPI00278864	23 kDa protein		1	9	75	0.97	1.038	1

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IPI00128982	proteolipid protein 2	Plp2	1	7.89	75	0.955	1.301	1.383
IPI00675649	Kelch repeat and BTB domain-containing protein 5	Kbtbd5	1	1.93	75	0.936	1.896	1.877
IPI00317740	guanine nucleotide binding protein (G protein); beta polypeptide 2 like 1	Gnb2l1	5	15.14	75	0.987	1.399	1.375
IPI00137736	ribosomal protein S28	Gm10443	2	33.33	75	0.84	1.084	1.1
IPI00856164	Putative uncharacterized protein	Eif4g1	6	6.68	75	0.933	1.277	1.266
IPI00224518	RAB5C; member RAS oncogene family	Rab5c	2	11.11	74	0.988	1.591	1.702
IPI00226993	thioredoxin 1	Txn1	4	29.52	74	1.037	1.242	1.268
IPI00153490	vomer nasal 1 receptor; H16	V1rh16	2	3.9	74	0.95	1.175	1.185
IPI00118196	mitochondrial ribosomal protein S5	Mrps5	4	9.03	74	0.975	1.306	1.472
IPI00421179	eukaryotic translation initiation factor 4; gamma 1 isoform a	Eif4g1	7	4.5	74	0.935	1.319	1.291
IPI00282957	microtubule-associated protein 7 domain containing 1 isoform 1	Mtap7d1	2	2.84	74	0.89	1.279	1.235
IPI00119842	acyl-Coenzyme A dehydrogenase; short/branched chain	Acadsb	3	7.87	74	0.879	1.243	1.196
IPI00123379	high density lipoprotein binding protein	Hdlbp	2	1.42	73	0.879	1.243	1.233
IPI00318645	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 11	Ndufa11	1	7.69	73	1.108	1.272	1.22
IPI00120914	Eukaryotic translation initiation factor 3 subunit F	Eif3f	2	7.2	73	0.9	1.145	1.118
IPI00223738	Serine/threonine-protein kinase OSR1	Oxsr1	5	10.82	73	0.962	1.247	1.188
IPI00223216	thiosulfate sulfurtransferase	Tst	1	4.38	73	1.12	1.624	1.976
IPI00127598	ATPase inhibitor; mitochondrial	Atpif1	3	25.47	73	1.165	1.218	1.165
IPI00119239	proteasome beta 6 subunit	Psmb6	2	7.98	73	0.797	1.107	1.052
IPI00132388	basic leucine zipper and W2 domains 1	Bzw1	3	6.21	73	1.06	1.542	1.406
IPI00117072	protein phosphatase 1G (formerly 2C); magnesium-dependent; gamma isoform	Ppm1g	1	3.14	73	1.213	1.769	1.818
IPI00659447	LIM domain only 7	Lmo7	3	1.94	73	0.986	1.249	1.293
IPI00114866	malonyl-CoA decarboxylase	Mlycd	1	2.24	73	0.979	1.214	1.263
IPI00115644	unnamed protein product	Sar1a	2	9.6	73	0.913	1.235	1.233

IPI00120769	Equilibrative nucleoside transporter 1	Slc29a1	2	5.87	73	0.945	1.052	1.001
IPI00133270	caseinolytic peptidase; ATP-dependent; proteolytic subunit	Clpp	2	12.13	73	0.907	1.46	1.379
IPI00153740	activator of heat shock 90kDa protein ATPase homolog 1	Ahsa1	4	10.36	72	1.064	1.776	1.639
IPI00278230	unnamed protein product	Nfu1	4	18.36	72	0.858	1.237	1.232
IPI00331174	chaperonin containing Tcp1; subunit 7 (eta)	Cct7	5	8.64	72	1.049	1.488	1.509
IPI00122562	PREDICTED: similar to zeta proteasome chain	PF00227			2 GVNTFS PEGR;AI GSASE GAQSSL QEVYHK	0.51991	0.891	
IPI00121627	cleft lip and palate associated transmembrane protein 1	Clptm1	1	2.26	72	0.728	1.112	1.033
IPI00133708	PL10 protein	D1Pas1	4	6.52	72	0.932	1.389	1.4
IPI00320217	chaperonin subunit 2 (beta)	Cct2	5	10.28	72	0.938	1.463	1.289
IPI00407543	unnamed protein product	Cfl1	4	21.83	72	0.936	1.857	1.826
IPI00125035	adenylate kinase 3-like 1	Ak3l2-ps	2	10.76	72	0.899	1.117	1.1
IPI00315488	Arginyl-tRNA synthetase; cytoplasmic	Rars	5	9.85	72	0.9	1.326	1.342
IPI00331173	lamin B receptor	Lbr	3	5.75	72	0.982	1.249	1.142
IPI00264062	glycogenin 1	Gyg	3	9.31	72	0.974	1.476	1.398
IPI00126011	28S ribosomal protein S2; mitochondrial	Mrps2	1	7.22	72	0.845	1.33	1.443
IPI00111255	cytochrome c oxidase; subunit VIlc	LOC100048613	2	28.57	72	0.841	0.882	0.89
IPI00654336	myosin light chain kinase 3	Mylk3	1	1.51	72	0.914	1.08	1.055
IPI00119676	apolipoprotein C-I precursor	Apoc1	1	10.23	71	0.876	0.934	0.9
IPI00461493	unnamed protein product	Sgcb	2	5.8	71	1.063	1.295	1.179
IPI00169953	coiled-coil-helix-coiled-coil-helix domain containing 7	Chchd7	1	21.18	71	0.959	0.968	0.982
IPI00308276	Kelch repeat and BTB domain-containing protein 3	LOC100044210	1	1.15	71	1.093	1.496	1.482
IPI00124836	sarcoglycan; beta (dystrophin-associated glycoprotein)	Sgcb	2	8.44	71	1.101	1.165	1.196
IPI00222515	proteasome 26S non-ATPase	Psmc11	3	8.06	71	0.917	1.394	1.288

IPI00271986	subunit 11 ATP synthase; H+ transporting; mitochondrial F0 complex; subunit f; isoform 2	Atp5j2	4	39.77	70	0.953	1.189	1.234
IPI00115680	protein kinase C substrate 80K-H	Prkcsh	3	5.57	70	0.91	1.606	1.525
IPI00380273	Gja1 protein	Gja1	2	5.53	70	1.081	0.898	0.86
IPI00346965	adaptor protein complex AP-1; beta 1 subunit	Ap1b1	5	5.09	70	0.863	1.351	1.343
IPI00555004	class III alcohol dehydrogenase; chi subunit	Adh5	4	9.09	70	0.965	1.502	1.522
IPI00400168	Nexilin	Nexn	5	7.25	70	1.068	1.498	1.458
IPI00134572	Cytochrome c-type heme lyase	Hccs	1	3.68	70	1.031	1.125	1.068
IPI00322610	Coenzyme A synthase	Coasy	1	1.95	69	0.868	1.125	1.174
IPI00109044	myosin light chain; regulatory B-like	2900073G 15Rik	3	15.7	69	0.944	1.258	1.225
IPI00312507	OPA3 protein	Opa3	2	10.61	69	1.024	1.17	1.136
IPI00126913	AAA-ATPase TOB3	Atad3a	4	5.08	69	0.945	1.186	1.124
IPI00134011	mitochondrial ribosomal protein L13	Mrpl13	1	4.49	69	1.049	1.272	1.432
IPI00121471	serine (or cysteine) proteinase inhibitor; clade B; member 6a	Serpib6a	4	9.79	69	0.956	1.869	1.816
IPI00317794	nucleolin	Ncl	6	5.94	69	0.889	1.296	1.352
IPI00230113	cytochrome b-5	Cyb5	2	18.66	69	0.932	1.135	1.107
IPI00458949	Down syndrome critical region protein 2	Psmg1	1	4.84	69	0.821	1.015	1.326
IPI00420807	splicing factor; arginine/serine-rich 1 isoform 1	LOC10004 8559	3	10.08	69	0.839	1.188	1.138
IPI00230427	macrophage migration inhibitory factor	Mif	1	7.83	68	0.963	1.102	1.115
IPI00849793	ribosomal protein L12	Gm9396	2	15.15	68	0.811	1.214	1.002
IPI00378681	retinoblastoma-associated factor 600	Ubr4	4	0.83	68	1.067	1.3	1.339
IPI00125960	N-myc downstream regulated 1	Ndrp1	1	3.55	68	0.907	1.471	1.604
IPI00395100	Try10-like trypsinogen	Gm5409	1	4.07	68	0.998	1.092	1.102
IPI00114594	Harvey rat sarcoma oncogene; subgroup R	Rras	2	13.3	68	0.91	1.035	1.021
IPI00331442	methionine sulfoxide reductase A	Msra	5	22.32	68	0.935	1.322	1.315
IPI00408265	Isoform 2 of Cordon-bleu protein- like 1	Cobl1	4	3.71	68	0.895	1.16	1.18

IPI00317401	PDS5; regulator of cohesion maintenance; homolog B	Pds5b	2	1.45	68	0.823	1.057	1.079
IPI00849187	PREDICTED: similar to hCG2036763	Rbm20	1	0.98	68	1.074	0.957	0.986
IPI00131176	cytochrome c oxidase subunit II	COX2	5	18.94	68	1.005	1.125	1.145
IPI00462925	mitochondrial ribosomal protein L38	Mrpl38	3	9.47	68	0.99	1.439	1.47
IPI00153579	mono(ADP-ribosyl)transferase; ART3	Art3	2	3.33	67	0.925	0.839	0.822
IPI00116843	NADH dehydrogenase subunit 4	ND4	2	3.7	67	1.176	1.41	1.402
IPI00622912	ryanodine receptor 1; skeletal muscle	Ryr1	4	0.54	67	0.965	1.137	1.116
IPI00221407	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; mitochondrial	Pdk1	6	14.98	67	0.944	1.164	1.101
IPI00121887	transcription elongation factor A (SII) 1 isoform 2	Tcea1	2	6.98	67	1.097	1.637	1.543
IPI00229527	Leukotriene A-4 hydrolase	Lta4h	1	1.96	67	0.962	1.544	1.667
IPI00109996	H-2 class I histocompatibility antigen; L-D alpha chain	H2-D1	2	7.46	67	1.174	1.785	1.697
IPI00113257	ubiquitin-conjugating enzyme E2 variant 1	Ube2v1	4	22.45	67	0.848	1.31	1.235
IPI00336807	Glycerol-3-phosphate dehydrogenase 1-like protein	Gpd1l	2	6.84	67	1.065	1.442	1.499
IPI00111258	major vault protein	Mvp	2	1.84	67	0.797	1.433	1.591
IPI00124699	Isoform 1 of Thioredoxin reductase 2; mitochondrial	Txnrd2	3	6.24	67	0.981	1.238	1.206
IPI00114733	Serpin H1	Serpinh1	6	14.87	67	1.003	2.234	2.218
IPI00320208	eukaryotic translation elongation factor 1 beta 2	Eef1b2	2	12	66	0.975	1.454	1.534
IPI00336881	N(G);N(G)-dimethylarginine dimethylaminohydrolase 2	Ddah2	2	7.72	66	0.952	1.374	1.417
IPI00331436	Cytosol aminopeptidase	Lap3	4	8.29	66	0.9	1.595	1.486
IPI00115660	treacle	Tcof1	2	1.59	66	0.856	1.048	1.263
IPI00474157	translocase of outer mitochondrial membrane 40	Tomm40	3	4.16	66	1.013	1.323	1.26
IPI00263048	nuclear mitotic apparatus protein 1	Numa1	3	1.43	66	1.03	1.52	1.664
IPI00132216	NADH-ubiquinone oxidoreductase B9 subunit	Ndufa3	4	28.57	66	0.919	1.079	1.046

IPI00228978	Clathrin light chain B	Cltb	3	10.92	66	0.923	1.263	1.26
IPI00405114	proteasome (prosome; macropain) 26S subunit ATPase 3	Psmc3	5	10.86	66	0.945	1.426	1.435
IPI00339916	Bifunctional aminoacyl-tRNA synthetase	Eprs	8	5.03	66	0.941	1.253	1.248
IPI00127408	RAS-related C3 botulinum substrate 1; isoform CRA_a	Rac1	3	12.32	66	0.872	1.487	1.498
IPI00153373	carboxymethylenebutenolidase-like	Cmb1	3	11.02	66	0.885	1.189	1.202
IPI00320462	unnamed protein product	Bph1	4	16.39	65	0.973	1.259	1.321
IPI00457611	septin 9 isoform a	Sep.09	3	4.63	65	0.846	1.465	1.424
IPI00344567	hypothetical protein LOC228715	Gm561	2	22.43	65	0.856	1.126	1.073
IPI00124742	eukaryotic translation initiation factor 4H	Eif4h	3	11.29	65	0.904	1.28	1.321
IPI00133015	nudix-type motif 8	Nudt8	3	17.62	65	0.917	1.296	1.182
IPI00271905	RAB geranylgeranyl transferase alpha subunit	Rabggta	1	2.65	65	0.902	1.574	1.641
IPI00399953	WNK lysine deficient protein kinase 1	Wnk1	3	0.88	65	1.135	1.979	1.829
IPI00227851	LBA	Lrba	2	0.67	64	1.082	0.97	1.239
IPI00461969	D123 gene product	Cdc123	2	6.85	64	1.247	2.09	2.024
IPI00108410	ATPase family; AAA domain containing 1	Atad1	3	6.93	64	0.867	1.095	1.115
IPI00129276	Eukaryotic translation initiation factor 3 subunit A	Eif3a	3	2.31	64	0.903	1.329	1.47
IPI00751974	syntrophin; acidic 1	Snta1	3	6.21	64	0.996	1.23	1.251
IPI00229927	Cdc42-interacting protein 4	Trip10	2	3.98	64	0.843	1.402	1.531
IPI00132765	translocase of outer mitochondrial membrane 6 homolog	LOC10004 7839	1	18.92	64	0.956	1.023	0.942
IPI00226730	chloride intracellular channel 5	Clic5	3	11.16	64	0.936	1.479	1.431
IPI00409462	HLA-B-associated transcript 1A	Bat1a	4	9.58	64	0.921	1.378	1.363
IPI00352219	growth arrest-specific 2 like 2	Gas2l2	1	0.7	64	0.844	1.38	1.375
IPI00128703	paxillin isoform alpha	Pxn	1	1.62	64	0.947	1.801	1.973
IPI00474446	eukaryotic translation initiation factor 2; subunit 1 alpha	Eif2s1	3	10.48	64	0.992	1.43	1.435
IPI00121420	Heat shock protein beta-2	Hspb2	2	14.29	64	0.757	1.268	1.231
IPI00330843	coagulation factor XII	F12	2	4.86	64	0.84	1.075	1.14
IPI00130390	Isoform 3 of Kinesin-like protein KIF1B	Kif1b	3	2.09	64	0.842	1.957	1.32

IPI00608097	aminopeptidase puromycin sensitive	Npepps	4	5	63	0.934	1.149	1.196
IPI00116546	cAMP-dependent protein kinase type II-alpha regulatory subunit	Prkar2a	5	13.22	63	0.926	1.104	1.106
IPI00129512	Proteasome subunit beta type-4	Psmb4	2	7.2	63	0.947	1.481	1.399
IPI00323251	guanylate binding protein 2	Gbp2	3	5.6	63	0.936	1.489	1.502
IPI00114380	glutathione S-transferase mu 5	Gstm5	3	12.05	63	0.906	1.217	1.25
IPI00132410	RAB5A; member RAS oncogene family	Rab5a	2	11.16	62	1.003	1.275	1.247
IPI00223415	asparaginyl-tRNA synthetase isoform 1	Nars	1	2.5	62	0.91	1.586	1.617
IPI00655150	tropomodulin 1	Tmod1	3	11.42	62	0.985	1.105	1.223
IPI00124115	S100 calcium binding protein A13	S100a13	3	28.57	62	0.967	1.373	1.332
IPI00331628	hydroxysteroid (17-beta) dehydrogenase 4	Hsd17b4	4	7.62	62	0.977	1.173	1.093
IPI00471080	hypothetical protein LOC71775	1300017J02Rik	3	3.14	62	0.917	1.308	1.264
IPI00227871	very large inducible GTPase 1	Gvin1	2	0.7	62	1.011	2.306	2.182
IPI00122559	Kinectin	Ktn1	5	3.69	62	1.059	1.305	1.275
IPI00467447	Ras GTPase-activating-like protein IQGAP1	Iqgap1	3	2.66	62	0.929	1.618	1.668
IPI00453724	Glycine cleavage system H protein; mitochondrial	Gcsh	1	5.88	62	0.949	1.142	1.15
IPI00131186	basic transcription factor 3; isoform CRA_b	Gm3531	4	28.4	62	1.112	1.372	1.578
IPI00135977	chloride intracellular channel 4 (mitochondrial)	Clic4	4	15.02	62	0.882	1.409	1.478
IPI00221817	von Willebrand factor A domain containing 5A	Vwa5a	3	4.67	61	1.018	1.643	1.832
IPI00117569	unnamed protein product	Rps11	3	15.06	61	0.938	1.459	1.429
IPI00222188	procollagen; type I; alpha 2	Col1a2	4	3.28	61	0.903	1.598	1.602
IPI00139780	ribosomal protein L23	Rpl23	2	12.86	61	0.934	1.898	1.853
IPI00119094	hypothetical protein LOC66469	2810405K02Rik	4	16.92	61	0.965	1.744	1.704
IPI00109033	hypothetical protein LOC76824	Fam54b	3	10.38	61	0.973	1.258	1.236
IPI00274747	cold shock domain containing E1; RNA binding isoform 1	Csde1	2	2.63	61	0.852	1.351	1.311
IPI00121200	leiomodulin 2 (cardiac)	Lmod2	3	6	61	1.017	1.392	1.455

IPI00462445	neural precursor cell expressed; developmentally down-regulated gene 4	Nedd4	3	3.27	61	1.044	1.503	1.464
IPI00223055	Glutaminyl-tRNA synthetase	Qars	3	4	61	1.115	1.41	1.417
IPI00342766	heterochromatin protein 1; binding protein 3 isoform 1	Hp1bp3	2	4.33	61	0.827	1.363	1.269
IPI00126006	Eukaryotic translation initiation factor 4 gamma 2	Eif4g2	3	3.31	61	0.854	1.21	1.274
IPI00407835	ubiquitin associated protein 2-like; isoform CRA_e	Ubp2l	1	1.08	61	0.893	0.897	1.009
IPI00654317	succinate dehydrogenase complex assembly factor 1	Sdhaf1	1	12.71	61	1.008	1.216	1.335
IPI00226521	short chain dehydrogenase/reductase family 39U; member 1	Sdr39u1	4	15.36	60	1.005	1.171	1.229
IPI00135345	nudix-type motif 2	Nudt2	1	10.2	60	1.114	1.486	1.333
IPI00223875	asparaginase-like 1	Asrgl1	3	8.9	60	0.945	1.197	1.159
IPI00222904	unnamed protein product	3222402P 14Rik	2	4.34	60	1.012	1.439	1.404
IPI00653542	PREDICTED: hypothetical protein	Gm1614	2	2.43	60	1.17	1.249	1.272
IPI00224776	HSPA12B	Hspa12b	2	2.77	60	0.983	1.177	1.16
IPI00121013	phosphoprotein enriched in astrocytes 15 isoform 2	Pea15a	2	14.62	60	0.948	2.192	2.293
IPI00124127	spermine synthase	Gm14680	2	4.92	60	1.023	1.545	1.495
IPI00109275	solute carrier family 25 (mitochondrial carrier; glutamate); member 22	Slc25a22	1	2.48	60	0.957	0.944	1.039
IPI00222547	ribosomal protein L28	Gm15435	4	22.63	60	0.89	1.337	1.335
IPI00119180	Serine/threonine-protein phosphatase 5	Ppp5c	1	1.6	60	0.87	1.275	1.225
IPI00124954	Kinesin-1 heavy chain	Kif5b	3	4.26	60	0.981	1.595	1.583
IPI00319509	membrane alanine aminopeptidase	Anpep	4	4.24	60	1.001	1.197	1.525
IPI00133608	OCIA domain containing 1 isoform 1	Ociad1	5	26.32	59	0.989	1.29	1.192
IPI00323748	stomatin	Stom	3	13.38	59	1.054	1.124	1.09
IPI00119060	flotillin 2 isoform 1	Flot2	3	7.48	59	1.044	1.323	1.274
IPI00125521	ribosomal protein S5	Rps5	1	4.41	59	1.002	1.374	1.271
IPI00416303	aminopeptidase-like 1	Npepl1	1	2.29	59	0.888	1.073	1.272

IPI00130391	protease; serine; 1	Prss1	1	8.13	59	0.97	1.267	1.243
IPI00116554	protein tyrosine phosphatase; non-receptor type 11 isoform a	Ptpn11	3	5.36	59	0.968	1.504	1.4
IPI00230689	Isoform 1 of Bullous pemphigoid antigen 1; isoforms 1/2/3/4	Dst	3	0.48	59	1.079	1.627	1.515
IPI00132276	vesicle-associated membrane protein 3	Vamp3	2	32.04	59	0.927	1.37	1.191
IPI00130794	tenascin XB	Tnxb	2	0.52	58	1.04	1.452	1.811
IPI00108762	mCG49241	Gm4905	1	12.77	58	0.951	1.232	1.239
IPI00453768	60S ribosomal protein L17	Rpl17	2	10.33	58	1.07	1.509	1.428
IPI00130227	Translation initiation factor IF-2; mitochondrial	Mtif2	3	4.81	58	0.959	1.359	1.245
IPI00228697	ankyrin 2; brain isoform 2	Ank2	2	1.81	58	0.962	0.955	1.174
IPI00420363	Probable ATP-dependent RNA helicase DDX5	Ddx5	3	5.05	58	0.912	1.171	1.176
IPI00322033	target of myb1-like 2 isoform a	Tom1l2	2	6.51	58	1.269	1.662	1.522
IPI00349401	unnamed protein product	Sf3b2	2	2.16	58	0.996	1.344	1.393
IPI00153266	saccharopine dehydrogenase (putative)	Sccpdh	1	2.33	58	0.937	1.083	1.049
IPI00319310	blood vessel epicardial substance	Bves	1	4.47	58	1.202	1.101	1.057
IPI00131224	transcription elongation factor B (SIII); polypeptide 2	Tceb2	3	23.73	58	1.002	1.498	1.632
IPI00124411	protein tyrosine phosphatase-like protein PTPLB	Ptplb	1	3.94	58	0.973	1.198	1.18
IPI00128450	family with sequence similarity 62 (C2 domain containing); member A	Fam62a	1	1.19	58	0.872	1.588	1.505
IPI00314106	cat eye syndrome chromosome region; candidate 5 homolog precursor	Cecr5	1	2.86	57	1.115	2.098	1.831
IPI00133706	RAB1B; member RAS oncogene family	Rab1b	2	11.94	57	1.016	1.411	1.546
IPI00222514	28S ribosomal protein S27; mitochondrial	Mrps27	1	2.65	57	0.985	1.265	1.314
IPI00261455	PREDICTED: similar to ribosomal protein S26	Gm6654	2	13.91	57	1.094	1.41	1.344
IPI00624501	arsA arsenite transporter; ATP-binding; homolog 1	Asna1	2	5.46	57	0.948	1.42	1.415
IPI00132966	peptidylprolyl isomerase D	Ppid	2	4.05	57	0.978	1.287	1.294

IPI00850254	similar to 2310046A06Rik protein	2310046A06Rik	3	4.34	57	0.97	1.295	1.301
IPI00224152	APEX nuclease 1	Apex1	2	7.89	57	0.858	1.326	1.329
IPI00131845	proteasome (prosome; macropain) subunit; alpha type 6	Psma6	3	9.76	57	0.908	1.415	1.391
IPI00113223	fatty acid synthase	Fasn	2	0.92	57	0.958	1.407	1.329
IPI00320716	Reticulon-4-interacting protein 1	Rtn4ip1	2	6.82	57	0.887	1.172	1.234
IPI00228343	unnamed protein product	Fech	2	6.4	57	0.925	1.249	1.128
IPI00125899	catenin (cadherin associated protein); beta 1; 88kDa	Ctnnb1	2	2.56	57	0.984	1.229	1.287
IPI00277930	Putative uncharacterized protein	Capg	2	5.14	57	0.828	1.723	1.808
IPI00128260	carboxypeptidase N; polypeptide 1	Cpn1	1	1.75	57	0.802	1.338	1.068
IPI00222548	ribosomal protein L29	Gm8210	2	11.25	57	1.006	1.545	1.552
IPI00112001	CAP; adenylate cyclase-associated protein; 2	Cap2	3	6.93	57	0.916	1.174	1.245
IPI00420261	high mobility group box 1	Gm15387	5	23.26	57	1.092	1.599	1.634
IPI00420593	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 2	Hisppd1	1	0.8	56	0.931	0.949	1.101
IPI00135579	mitofusin 1	Mfn1	2	3.78	56	0.994	1.068	1.018
IPI00129685	Translationally-controlled tumor protein	LOC100048430	2	13.41	56	1.618	1.98	2.118
IPI00170232	supervillin isoform 1	Svil	2	1.01	56	1.268	2.098	2.255
IPI00416942	protein phosphatase 2; regulatory subunit B (B56); alpha isoform	Ppp2r5a	2	3.7	56	1.005	1.19	1.206
IPI00121135	splicing factor; arginine/serine-rich 2	Sfrs2	2	11.31	56	0.987	1.041	1.234
IPI00125091	LIM and SH3 protein 1	Lasp1	3	11.03	56	1.077	1.523	1.546
IPI00138691	actin related protein 2/3 complex; subunit 4	Arpc4	2	11.31	56	0.888	1.492	1.395
IPI00469260	elongation factor Tu GTP binding domain containing 2 isoform a	Eftud2	2	1.96	56	0.985	1.45	1.362
IPI00131873	COP9 signalosome subunit 6	Cops6	1	4.63	55	0.944	1.327	1.335
IPI00112138	magnesium-dependent phosphatase 1	1810034K20Rik	1	7.93	55	0.835	1.059	1.1
IPI00323819	ribosomal protein S20	Rps20	2	16.81	55	1.016	1.664	1.631
IPI00312174	prostaglandin E synthase 2	Ptges2	2	5.99	55	1.125	1.282	1.359
IPI00130162	Synaptopodin-2	Synpo2	2	2.12	55	0.795	0.962	1.002

IPI00165711	BRCA1-A complex subunit MERIT40	5430437P 03Rik	1	3.3	55	0.91	1.224	1.31
IPI00265025	galactokinase 1	Galk1	1	2.55	55	1.171	1.848	1.579
IPI00109354	Seryl-tRNA synthetase; mitochondrial	Sars2	1	1.54	55	0.801	1.002	1.036
IPI00129903	Nidogen-2	Nid2	2	1.43	55	0.868	1.284	1.325
IPI00119111	calponin 3; acidic	Cnn3	1	3.94	55	1.041	2.228	2.067
IPI00226515	transgelin	Tagln	4	19.4	55	0.95	1.806	1.718
IPI00469195	enoyl Coenzyme A hydratase domain containing 2	Echdc2	4	15.2	55	0.972	1.212	1.175
IPI00162790	ribosomal protein L18A	Rpl18a	1	7.39	55	0.864	1.372	1.435
IPI00153710	RCSD domain containing 1 isoform a	Rcsd1	3	5.83	55	0.951	1.381	1.409
IPI00113655	ribosomal protein S6	Gm13654	5	16.87	55	0.941	1.296	1.347
IPI00116169	NADH-ubiquinone oxidoreductase chain 2	ND2	3	8.99	55	0.914	1.206	1.254
IPI00121319	LIM only protein HLP	Crip2	6	25.96	54	1.084	1.253	1.224
IPI00122015	hypothetical protein LOC223601	Fam49b	2	7.1	54	0.846	1.341	1.267
IPI00112584	calcium/calmodulin-dependent protein kinase II; delta isoform 2	Camk2d	3	6.01	54	1.089	1.704	1.785
IPI00323617	X-linked myotubular myopathy gene 1	Mtm1	2	4.55	54	0.891	1.067	1.143
IPI00111416	syntaxin 12	Stx12	1	5.47	54	0.94	1.224	1.391
IPI00130455	phospholemman precursor	Fxyd1	2	19.57	54	0.989	1.104	1.107
IPI00420651	protein phosphatase 1; regulatory subunit 9B	Ppp1r9b	2	1.96	54	1.1	1.289	1.256
IPI00466276	Isoform Alpha-7X1X2B of Integrin alpha-7	Itga7	4	3.39	54	0.872	1.045	0.996
IPI00153144	sulfite oxidase	Suox	2	3.3	54	0.877	0.934	0.989
IPI00109212	sorting nexin 2	Snx2	2	4.05	54	0.86	1.315	1.313
IPI00123186	ras homolog gene family; member T1; isoform CRA_a	Rhot1	1	2.08	53	0.848	1.078	1.087
IPI00844691	LIM and calponin homology domains 1	Limch1	2	1.7	53	1.107	1.469	1.398
IPI00122421	ribosomal protein L27-like	Gm11518	1	5.88	53	0.929	1.339	1.347
IPI00396671	ATP-binding cassette; sub-family F (GCN20); member 1	Abcf1	1	1.08	53	1.029	2.201	2.275
IPI00264501	phosphatidylinositol-binding clathrin	Picalm	2	2.42	53	0.989	1.853	1.826

	assembly protein								
IPI00130344	chloride intracellular channel 1	Clic1	3	9.54	53	0.959	1.648	1.718	
IPI00336958	erythropoietin 4 immediate early response	Zc3h15	1	3.29	53	0.954	1.17	1.181	
IPI00226234	Phospholipase A-2-activating protein	Plaa	3	4.03	53	0.87	1.285	1.307	
IPI00119930	AMP-activated protein kinase; noncatalytic gamma-1 subunit	Prkag1	2	5.76	53	0.956	1.168	1.177	
IPI00118235	mitochondrial ribosomal protein L3	Mrpl3	2	6.32	53	1.013	1.214	1.613	
IPI00154004	otubain 1	LOC100046081	3	15.87	53	1.174	1.612	1.655	
IPI00187512	5'-nucleotidase; cytosolic III	Nt5c3	5	12.69	53	0.945	1.247	1.219	
IPI00116896	ATP synthase F0 subunit 8	ATP8	2	34.33	53	0.891	1.111	1.08	
IPI00466128	aldo-keto reductase family 1; member A4 (aldehyde reductase)	Akr1a4	2	8	52	0.966	1.521	1.574	
IPI00323600	coronin; actin binding protein 1A	Coro1a	1	3.47	52	0.884	2.734	2.597	
IPI00129479	phosphatidylinositol-5-phosphate 4-kinase; type II; gamma	Pip4k2c	1	2.85	52	0.848	1.825	1.539	
IPI00169699	RAB12; member RAS oncogene family	Rab12	2	10.65	52	0.939	1.168	1.242	
IPI00115679	neutral alpha-glucosidase AB	Ganab	2	2.8	52	0.898	1.625	1.532	
IPI00313900	lumican	Lum	1	2.96	52	1.049	1.561	1.499	
IPI00221741	TIP41; TOR signalling pathway regulator-like	Tiprl	1	5.17	52	0.866	1.548	1.143	
IPI00125496	calcitonin receptor isoform b precursor	Calcr	1	1.21	52	0.928	1.104	1.096	
IPI00116331	small glutamine-rich tetratricopeptide repeat (TPR) containing protein	Sgta	2	7.62	52	1.037	1.656	1.975	
IPI00222429	nodal modulator 1	Nomo1	2	1.24	52	0.999	1.356	1.342	
IPI00604967	mCG49675	LOC100043752	3	9.12	52	0.991	1.443	1.412	
IPI00126255	inositol (myo)-1(or 4)-monophosphatase 2	Impa2	2	7.93	52	0.895	1.115	1.069	
IPI00330576	Rab interacting lysosomal protein	Rilp	1	4.07	52	0.971	1.223	1.482	
IPI00114065	complement component 2 (within H-2S)	Cfb	3	2.35	52	0.898	1.273	1.36	
IPI00153421	dynein cytoplasmic 1 light	Dync1li1	2	5.16	52	0.871	1.133	1.277	

	intermediate chain 1							
IPI00132169	translocase of inner mitochondrial membrane 8 homolog b	Timm8b	2	22.89	52	0.818	0.735	0.733
IPI00123639	calreticulin	Calr	6	11.3	52	1.062	1.808	1.79
IPI00225633	RNA polymerase II transcriptional coactivator	Sub1	2	14.96	52	0.959	1.808	1.846
IPI00471097	ghiso	Lym5	3	26.74	52	0.991	1.427	1.382
IPI00121427	S100 calcium binding protein A6 (calcyclin)	S100a6	2	16.85	52	0.98	1.647	1.666
IPI00112555	glycyl-tRNA synthetase	Gars	2	2.61	52	0.994	1.782	1.691
IPI00261239	eukaryotic translation initiation factor 2B; subunit 5 epsilon	Eif2b5	2	2.65	52	1.046	1.101	1.348
IPI00116563	Rab5B	Rab5b	1	5.24	52	0.992	1.434	1.412
IPI00330246	Isoform 2 of Pleckstrin homology-like domain family B member 1	Phldb1	2	1.31	52	1.007	1.368	1.653
IPI00122499	Transmembrane protein 143	Tmem143	1	2.84	52	0.937	0.817	0.85
IPI00116718	PREDICTED: similar to LOC446231 protein	Gm10145	2	9.74	52	0.977	1.45	1.398
IPI00118205	four and a half LIM domains 2	Fhl2	6	21.15	51	0.927	1.066	1.045
IPI00114263	Mpv17 transgene; kidney disease mutant	Mpv17	1	5.11	51	1.01	1.136	1.158
IPI00153990	ARP1 actin-related protein 1 homolog B; centractin beta	Actr1b	4	10.9	51	0.913	1.317	1.257
IPI00111981	Obg-like ATPase 1 isoform a	Ola1	2	3.54	51	0.963	1.437	1.441
IPI00119022	tRNA 5-methylaminomethyl-2-thiouridylate methyltransferase	Trmu	2	5.76	51	0.987	1.173	1.163
IPI00678003	inosine triphosphatase	Itpa	1	5.56	51	0.89	1.406	1.359
IPI00317902	proteasome (prosome; macropain) subunit; beta type 5	Psmb5	2	8.71	51	0.964	1.298	1.344
IPI00283203	methylmalonic aciduria (cobalamin deficiency) type B homolog	Mmab	2	10.13	51	0.923	1.064	1.113
IPI00132134	plakophilin 2	Pkp2	3	3.27	51	0.956	1.104	1.107
IPI00124223	proteasome (prosome; macropain) 28 subunit; alpha	Psme1	3	12.05	51	0.964	1.394	1.387
IPI00850743	2310046A06Rik protein	2310046A06Rik	3	12.54	50	0.894	1.223	1.208
IPI00108774	UV excision repair protein RAD23 homolog B	Rad23b	2	5.53	50	0.927	1.335	1.323

IPI00269481	capping protein (actin filament) muscle Z-line; beta isoform b	Capzb	2	10.29	50	1.062	1.551	1.482
IPI00341550	NADH dehydrogenase subunit 1	ND1	2	5.03	50	0.964	1.086	1.052
IPI00225254	metaxin 2	Mtx2	3	12.93	50	0.852	1.094	1.083
IPI00469947	lunapark isoform a	Lnp	1	2.59	50	0.893	1.075	0.94
IPI00116112	dynactin 2	Dctn2	3	10.7	50	1.12	1.285	1.207
IPI00109611	growth and transformation- dependent protein	Fam162a	4	20	50	0.947	1.168	1.111
IPI00273803	ribosomal protein L15	Rpl15	3	11.27	50	0.956	1.306	1.355
IPI00131498	CD93 antigen	Cd93	3	5.9	50	0.984	1.594	2.001
IPI00881215	10 kDa protein	Vps29	2	17.58	50	0.987	1.11	0.995
IPI00132734	dynein light chain LC8-type 2	Dynll2	1	7.87	50	0.953	1.081	0.98
IPI00468360	WD repeat domain 65	Wdr65	2	1.36	50	0.97	1.054	1.007
IPI00308001	oxidase assembly 1-like	Oxa1l	1	2.08	50	0.94	1.245	1.274
IPI00453867	24-dehydrocholesterol reductase precursor	Dhcr24	1	1.16	50	0.869	1.171	1.161
IPI00108980	copine IV	Cpne4	1	1.62	50	0.997	1.271	1.233
IPI00222555	S100 calcium binding protein A10	S100a10	2	17.53	49	0.816	1.275	1.333
IPI00137331	Adenylyl cyclase-associated protein 1	Cap1	2	5.7	49	0.87	2.061	1.969
IPI00138406	RAS-related protein-1a	Rap1a	2	9.78	49	1.02	1.511	1.48
IPI00127172	DEAD (Asp-Glu-Ala-Asp) box polypeptide 1	Ddx1	2	2.3	49	0.885	1.235	1.302
IPI00133403	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 3	Ndufb3	1	10.58	49	0.817	0.871	0.899
IPI00330171	RIKEN cDNA 1810043M20	Bat2d	3	7.86	49	0.999	1.266	1.321
IPI00469392	reticulon 4 isoform A	Rtn4	2	1.64	49	1.012	2.299	2.264
IPI00118217	Syntaxin-7	Stx7	2	10.73	49	0.876	1.163	1.137
IPI00221494	LIM domain containing preferred translocation partner in lipoma isoform 1	Lpp	2	3.75	49	0.907	2.069	1.913
IPI00279079	fibrinogen beta chain	Fgb	5	10.19	49	0.955	1.565	1.557
IPI00122687	Tars2 protein	Tars2	3	3.87	49	1.105	1.302	1.238
IPI00318901	myosin; light polypeptide 4	Myl4	3	12.44	49	0.983	1.149	1.09
IPI00336503	mCG129810; isoform CRA_c	Pdxdc1	2	3.8	48	0.761	1.162	1.202
IPI00265107	mCG121875	Gm5044	5	16.54	48	0.959	1.405	1.419
IPI00109627	ATP synthase; H+ transporting;	Gm10039	1	5.15	48	1.017	1.153	1.131

	mitochondrial F0 complex; subunit c; isoform 1								
IPI00276222	pleckstrin homology domain containing; family C (with FERM domain) member 1	Fermt2	2	3.82	48	0.921	1.414	1.453	
IPI00126072	vesicle amine transport protein 1 homolog (T californica)	Vat1	1	2.22	48	1.079	1.655	1.755	
IPI00226073	heterogeneous nuclear ribonucleoprotein F	Hnrnpf	3	6.27	48	1.045	1.556	1.561	
IPI00624175	acid phosphatase 6; lysophosphatidic	Acp6	2	3.83	48	0.912	1.217	1.222	
IPI00229483	Sec24 related gene family; member C	Sec24c	2	2.55	48	1.073	1.479	1.24	
IPI00263899	NAD(P)H dehydrogenase; quinone 1	Nqo1	3	9.85	48	0.925	1.83	1.801	
IPI00120716	guanine nucleotide-binding protein; beta-1 subunit	Gnb1	2	5	48	0.979	1.339	1.26	
IPI00314069	acyl-CoA thioesterase 9	Acot9	2	4.33	48	0.968	1.453	1.406	
IPI00112894	popeye domain containing 2 isoform 2	Popdc2	2	5.72	48	0.943	1.325	1.281	
IPI00345740	CDGSH iron sulfur domain 3	Cisd3	2	14.93	48	0.897	1.063	1.026	
IPI00227678	DNA segment; Chr 5; ERATO Doi 135; expressed	Sepsecs	1	1.39	48	0.939	1.162	1.147	
IPI00352475	PDGFA associated protein 1	Pdap1	3	18.23	47	0.999	1.206	1.126	
IPI00120761	solute carrier family 4 (anion exchanger); member 1	Slc4a1	3	3.01	47	0.988	0.911	0.929	
IPI00131548	proline synthetase co-transcribed isoform a	Prosc	5	16.42	47	0.97	0.995	1.071	
IPI00123342	hypoxia up-regulated 1	Hyou1	3	2.8	47	0.929	1.33	1.334	
IPI00110885	Putative uncharacterized protein	Cyb5r3	2	7.99	47	0.945	1.347	1.404	
IPI00330599	LYRIC	Mtdh	1	1.9	47	0.984	1.369	1.466	
IPI00135186	calumenin isoform 1	Calu	3	10.16	47	0.927	2.136	2.036	
IPI00229470	Protein LSM14 homolog B	Lsm14b	2	3.38	47	0.98	1.197	1.157	
IPI00118723	Serine/threonine-protein phosphatase 2A regulatory subunit B'	Ppp2r4	2	7.12	47	0.974	1.425	1.603	
IPI00115992	PREDICTED: similar to ribosomal protein S25	Gm4963	2	15.2	47	0.905	1.877	1.739	

IPI00137735	ribosomal protein S25	Rps25	3	24	47	0.905	1.958	1.628
IPI00117063	pigpen	Fus	1	1.74	47	0.995	1.479	1.516
IPI00314919	suppressor of var1; 3-like 1	Supv3l1	2	3.08	47	0.889	1.197	1.15
IPI00874570	ceruloplasmin; isoform CRA_a	Cp	2	2.4	47	0.965	1.387	1.323
IPI00453815	transforming growth factor beta regulated gene 4	Tbrg4	2	3.17	47	1.024	1.267	1.064
IPI00169752	lactation elevated 1	Lace1	3	5	46	1.016	1.464	1.507
IPI00309322	heme oxygenase (decycling) 2	Hmox2	1	2.86	46	0.994	1.312	1.349
IPI00165849	isochorismatase domain containing 1	Isoc1	2	8.08	46	1.022	1.068	1.141
IPI00111954	fructose-1;6-bisphosphatase 2	Fbp2	2	5.31	46	0.866	1.114	1.075
IPI00626790	glutamine synthetase	Glul	1	2.14	46	0.911	1.661	1.669
IPI00467338	Ran GTPase-activating protein 1	Rangap1	1	1.87	46	0.67	0.91	1.184
IPI00319965	proteasome; 26S; non-ATPase regulatory subunit 6	Psm6	2	5.14	46	0.878	1.314	1.387
IPI00137194	solute carrier family 16; member 1	Slc16a1	3	8.72	46	0.813	1.003	1.126
IPI00135277	retinoblastoma binding protein 9	LOC67752 4	2	9.14	46	1.085	1.593	1.526
IPI00119818	inter alpha-trypsin inhibitor; heavy chain 4 isoform 2	Itih4	3	2.87	46	0.904	1.103	1.138
IPI00271951	protein disulfide isomerase A4	Pdia4	2	2.18	46	1.148	1.849	1.75
IPI00284978	mitochondrial ribosomal protein L9	Mrpl9	4	13.58	46	0.939	1.445	1.436
IPI00874975	afamin	Afm	2	2.8	46	1.068	1.579	1.583
IPI00117610	PREDICTED: similar to 60S ribosomal protein L9	Gm14231	2	8.12	46	0.928	1.171	1.148
IPI00120937	Diablo homolog; mitochondrial	Diablo	2	10.55	46	1.022	1.175	1.325
IPI00120715	translocase of outer mitochondrial membrane 20 homolog	LOC10004 4630	1	8.97	45	0.848	0.92	0.941
IPI00109870	N-ethylmaleimide sensitive fusion protein attachment protein gamma	Napg	1	2.88	45	0.704	1.39	1.251
IPI00461212	oxysterol-binding protein-like protein 8 isoform b	Osbpl8	2	2.24	45	0.925	1.564	1.541
IPI00127415	nucleophosmin 1	Npm1	2	7.53	45	0.925	1.22	1.269
IPI00225288	Coiled-coil domain-containing protein 90B; mitochondrial	Ccdc90b	3	8.98	45	0.94	1.145	1.121
IPI00116247	serine (or cysteine) proteinase inhibitor; clade B; member 6b	Serpib6b	2	4.51	45	0.925	1.58	1.66
IPI00153702	Bcl-2 inhibitor of transcription	Pthr2	1	8.24	45	1.027	1.389	1.263

	isoform a							
IPI00118757	phosphohistidine phosphatase	Phpt1	3	20.16	45	0.945	1.186	1.193
IPI00315548	ribosomal protein L21	LOC100046290	6	33.75	45	0.875	1.32	1.379
IPI00230440	Adenosylhomocysteinase	Ahcy	3	8.56	44	1.012	1.181	1.218
IPI00125150	apolipoprotein B mRNA editing enzyme; catalytic polypeptide 2	Apobec2	3	12.5	44	0.965	1.222	1.262
IPI00129105	SUMO1 activating enzyme subunit 1	Sae1	3	6.57	44	1.04	1.571	1.563
IPI00830711	PREDICTED: hypothetical protein	LOC100044509	1	1.68	44	0.892	1.436	1.391
IPI00648513	conserved nuclear protein Nhn1 isoform b	Zc3h18	2	1.58	44	0.842	1.334	0.956
IPI00113738	Tryptophanyl-tRNA synthetase; cytoplasmic	Wars	3	5.82	44	0.909	1.423	1.356
IPI00132460	ribosomal protein L26	Gm15772	3	17.93	44	0.891	1.342	1.236
IPI00120199	peptidase (mitochondrial processing) alpha	Pmpca	2	3.63	44	0.905	1.371	1.353
IPI00314543	Smoothelin	Smtn	3	3.36	44	0.972	1.317	1.27
IPI00461456	ribosomal protein L23a	Gm10132	3	18.59	44	0.9	1.09	1.077
IPI00109791	cytoglobin	Cygb	2	8.95	44	0.944	1.695	1.651
IPI00315808	mitochondrial ribosomal protein S36	Mrps36	2	33.33	44	0.872	0.958	1.016
IPI00314467	proteasome beta 3 subunit	Psmb3	2	7.8	44	1.001	1.371	1.318
IPI00116668	integrin-linked kinase	Ilk	2	3.32	44	1.055	1.425	1.428
IPI00319652	Glutathione peroxidase 1	Gpx1	2	9.95	44	0.926	1.25	1.267
IPI00122293	proline arginine-rich end leucine-rich repeat	Prelp	2	6.61	43	0.873	1.116	1.359
IPI00133977	unnamed protein product	Nap114	3	6.64	43	1.088	1.757	1.933
IPI00788331	glutaryl-Coenzyme A dehydrogenase	Gcdh	4	7.99	43	0.924	1.269	1.171
IPI00115244	fibroblast growth factor 1	Fgf1	2	12.26	43	0.789	0.899	0.889
IPI00467383	cullin 3	Cul3	3	3.91	43	1.075	1.249	1.213
IPI00125493	myosin; light polypeptide kinase	Mylk	2	0.97	43	0.872	1.319	1.305
IPI00462746	sperm associated antigen 9 isoform 1	Spag9	2	2.14	43	1.031	1.256	1.317
IPI00169896	solute carrier family 44; member 2	Slc44a2	3	4.53	43	0.951	1.078	1.122
IPI00480233	NADH dehydrogenase subunit 5	ND5	3	3.95	42	1.153	1.473	1.302

IPI00648053	mCG2330; isoform CRA_a	Tomm5	2	14.42	42	0.869	0.86	0.892
IPI00284242	Isoform 1 of Protein enabled homolog	Enah	1	2.82	42	1.01	1.988	2.169
IPI00224626	cell division cycle 10 homolog	Sep.07	3	6.18	42	0.888	1.435	1.414
IPI00323130	transcription elongation factor B (SIII); polypeptide 1	LOC100045866	3	25.89	42	0.92	1.392	1.388
IPI00227186	alcohol dehydrogenase; iron containing; 1	Adhfe1	1	2.8	42	0.917	1.047	1.218
IPI00112335	mitogen-activated protein kinase kinase 4	Map2k4	1	3.02	42	0.97	1.265	1.437
IPI00121545	protein phosphatase 3; catalytic subunit; alpha isoform	Ppp3ca	2	3.84	42	0.941	1.31	1.329
IPI00317966	Steroid receptor RNA activator 1	Sra1	2	6.82	42	0.997	1.451	1.457
IPI00122267	SH3-domain GRB2-like B1	Sh3glb1	2	4.38	42	0.867	1.313	1.317
IPI00130961	Arginyl-tRNA--protein transferase 1	Ate1	1	2.33	42	1.123	1.605	1.547
IPI00132443	heterogeneous nuclear ribonucleoprotein M isoform a	Hnrnmp	2	2.74	42	1.045	1.53	1.445
IPI00467840	suppressor of K+ transport defect 3	Clpb	2	4.43	42	0.998	1.382	1.336
IPI00162769	mitochondrial ribosomal protein L24	Mrpl24	1	4.63	42	0.947	1.287	1.214
IPI00323177	arginyl-tRNA synthetase 2; mitochondrial	Rars2	2	3.63	42	0.94	1.411	1.453
IPI00331321	Ras suppressor protein 1	Rsu1	2	8.66	42	0.961	1.438	1.445
IPI00620362	heterogeneous nuclear ribonucleoprotein L	Hnrnpl	3	4.1	41	1.064	1.293	1.223
IPI00315452	Purine nucleoside phosphorylase	Pnp1	2	9.34	41	1.067	1.205	1.274
IPI00830478	hypothetical protein LOC218236	Fam120a	2	1.35	41	0.961	1.546	1.644
IPI00762434	HECT domain containing 1	Hectd1	3	0.8	41	0.971	1.337	1.322
IPI00308971	insulin-like growth factor 2 receptor	Igf2r	2	0.97	41	1.083	1.638	1.624
IPI00126634	polymerase delta interacting protein 38	Poldip2	2	6.25	41	0.983	1.251	1.352
IPI00187452	succinate dehydrogenase complex; subunit D; integral membrane protein	Sdhb	1	4.4	41	1.01	1.182	1.136
IPI00269240	unnamed protein product	Gfm2	1	1.73	41	0.997	1.461	1.319
IPI00171974	chromatin modifying protein 4B	Chmp4b	3	12.5	41	1.041	1.564	1.536
IPI00113243	transmembrane protein 85	Tmem85	1	6.56	41	1.004	1.39	1.387
IPI00318938	eukaryotic translation initiation factor 4E binding protein 1	Eif4ebp1	2	15.38	41	1.001	1.216	1.084

IPI00115538	PREDICTED: similar to thymosin beta-4	LOC100047211	2	6.25	41	0.831	1.075	1.027
IPI00131720	calcium channel; voltage-dependent; beta 4 subunit isoform b	Cacnb4	1	1.44	40	0.904	1.186	1.173
IPI00124979	RNA binding motif protein; X-linked	RbmX	2	3.84	40	1.023	1.469	1.45
IPI00323406	ATP synthase mitochondrial F1 complex assembly factor 1	Atpaf1	2	9.26	40	1.166	1.309	1.498
IPI00134549	Lysosome-associated membrane glycoprotein 2	Lamp2	2	3.86	40	0.829	1.293	1.308
IPI00118775	PREDICTED: similar to ribosomal protein L30	Gm6109	2	21.74	40	1.056	1.456	1.149
IPI00108271	ELAV-like protein 1	Elavl1	2	7.67	40	0.886	1.417	1.327
IPI00119305	ErbB3-binding protein 1	Pa2g4	2	3.81	40	1.241	2.13	2.05
IPI00130147	RNA-binding protein Raly	Raly	2	10.26	40	1.185	1.023	1.103
IPI00453996	Myosin-14	Myh14	2	1.3	40	0.937	1.364	1.316
IPI00457661	proteasome 26S non-ATPase subunit 5	Psmd5	2	3.37	40	1.06	1.382	1.356
IPI00133360	mitochondrial ribosomal protein S14	Mrps14	1	10.16	40	0.954	1.379	1.212
IPI00113539	FINC_MOUSE Fibronectin precursor (FN)	Fn1	1	24.83	40	0.989	1.394	1.367
IPI00132344	hypothetical protein LOC68241	9530058B02Rik	2	10.63	40	1.017	1.262	1.288
IPI00128227	transmembrane protein 38A	Tmem38a	1	3.36	40	0.802	1.036	1.061
IPI00672824	protein phosphatase 2C; magnesium dependent; catalytic subunit isoform c	Ppm2c	1	2.79	40	0.982	1.177	1.3
IPI00229722	nucleoporin 214	Nup214	1	0.53	40	0.768	1.231	1.146
IPI00663627	Filamin-B	Flnb	2	1.08	40	0.891	1.702	2.022
IPI00604945	3-mercaptopyruvate sulfurtransferase	Mpst	2	7.74	40	0.921	1.213	1.436
IPI00112822	transcription factor A; mitochondrial	Tfam	3	6.17	39	1.089	1.377	1.31
IPI00263042	U6 snRNA-associated Sm-like protein LSm8	Lsm8	1	10.42	39	1.099	1.268	1.252
IPI00132206	Dnajc5 protein	Dnajc5	2	9.31	39	1.278	1.639	1.44
IPI00123129	staphylococcal nuclease domain containing 1	Snd1	3	2.53	39	0.954	1.213	1.205

IPI00153832	SH3-domain GRB2-like endophilin B2	Sh3glb2	2	6.58	39	0.891	1.283	1.263
IPI00119057	eukaryotic translation initiation factor 4E	Eif4e	2	10.14	39	0.863	1.526	1.311
IPI00153792	hypothetical protein LOC224904	2410015M20Rik	2	10.92	39	0.922	1.086	1.061
IPI00331555	branched chain keto acid dehydrogenase E1; alpha polypeptide	Bckdha	4	8.3	39	0.989	1.469	1.485
IPI00170128	spastic paraplegia 7 homolog	Spg7	2	1.54	39	0.909	1.298	1.298
IPI00222838	Mitochondrial intermediate peptidase	LOC100047713	2	2.38	39	0.988	1.279	1.222
IPI00471238	fucosidase; alpha-L- 2; plasma	Fuca2	1	1.52	39	0.921	1.106	1.132
IPI00118963	mitochondrial ribosomal protein L12	Mrpl12	1	6.47	39	0.821	0.977	1.003
IPI00110120	LIM and senescent cell antigen-like domains 1; isoform CRA_c	Lims1	1	2.02	39	0.98	1.344	1.342
IPI00154045	glutamic pyruvate transaminase	Gpt	3	6.85	39	0.805	1.3	1.072
IPI00123281	leucine rich repeat containing 59	Lrrc59	2	4.89	39	0.953	1.507	1.529
IPI00127021	neural precursor cell expressed; developmentally down-regulated gene 8	Nedd8	2	18.52	39	1.076	1.26	1.264
IPI00263879	ribosomal protein L35	Gm2000	2	12.2	39	1.008	1.381	1.377
IPI00322304	histidine-rich glycoprotein	Hrg	1	2.8	38	0.909	1.242	1.191
IPI00109672	viral oncogene yes homolog	Yes1	1	1.48	38	1.043	1.37	1.479
IPI00605645	F-box and leucine-rich repeat protein 20	Fbxl20	2	2.52	38	1.014	1.229	1.221
IPI00121974	putative membrane protein	Tmco1	1	4.79	38	0.948	1.499	1.368
IPI00223832	APG16L beta isoform	Atg16l1	2	2.97	38	0.922	1.421	1.371
IPI00132314	Nucleobindin-1	Nucb1	3	5.01	38	0.904	1.218	1.186
IPI00828513	proteasome 26S ATPase subunit 4	Psmc4	2	3.59	38	0.849	1.15	1.153
IPI00408796	splicing factor 3a; subunit 1	Sf3a1	1	0.88	38	0.876	1.02	1.018
IPI00110180	coiled-coil domain containing 90A	Ccdc90a	2	5.59	38	0.906	1.051	1.072
IPI00223987	leucyl/cystinyl aminopeptidase	Lnpep	2	1.85	38	0.855	1.187	1.078
IPI00136334	ATP-binding cassette; sub-family C; member 9 isoform b	Abcc9	2	0.71	38	0.794	0.902	0.916
IPI00229834	Coatmer subunit alpha	Copa	2	1.47	38	1.134	1.662	1.535
IPI00130127	glycogen synthase 1 (muscle)	Gys1	3	2.98	38	1.184	1.872	1.77
IPI00135446	glycerol kinase isoform 1	Gyk	2	4.01	38	0.948	1.282	1.251

IPI00110684	pyrophosphatase 1	Ppa1	2	7.61	38	0.938	1.383	1.406
IPI00404590	unnamed protein product	H1f0	2	9.5	38	0.979	1.205	1.116
IPI00331528	glutaredoxin	Glrx	2	17.76	38	0.79	1.352	1.225
IPI00323881	Importin subunit beta-1	Kpnb1	2	3.65	38	0.872	1.234	1.532
IPI00387430	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 8	Ndufb8	3	17.2	38	0.779	1.108	0.992
IPI00648658	clathrin; light polypeptide A isoform d	Clta	2	6.02	38	0.997	1.388	1.276
IPI00114667	proteasome (prosome; macropain) 26S subunit; non-ATPase; 7	Psmd7	2	5.3	38	1.027	1.427	1.487
IPI00119024	ADP-ribosylation factor-like 6 interacting protein 5	Arl6ip5	1	5.85	37	0.889	1.259	1.216
IPI00420231	X-prolyl aminopeptidase (aminopeptidase P) 1; soluble; isoform CRA_b	Xpnpep1	1	1.05	37	0.874	1.376	1.564
IPI00757372	isochorismatase domain containing 2a	Isoc2a	2	6.8	37	0.892	1.15	1.207
IPI00128071	USO1 homolog; vesicle docking protein	Uso1	2	1.88	37	0.869	1.161	1.193
IPI00309768	carboxyl terminal LIM domain protein 1	Pdlim1	1	3.06	37	0.88	1.737	1.711
IPI00381019	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin c2 isoform 3	Smarcc2	2	2.73	37	0.954	1.358	1.472
IPI00228106	hypothetical protein LOC216792	A230051G13Rik	2	5.59	37	0.834	0.844	0.906
IPI00222430	diazepam binding inhibitor isoform 1	Dbi	4	33.33	37	1.265	1.436	1.361
IPI00131770	hypothetical protein LOC66928	3110001D03Rik	1	8.11	37	0.94	1.146	1.007
IPI00130236	ariadne ubiquitin-conjugating enzyme E2 binding protein homolog 1	Arih1	2	4.68	37	0.944	1.402	1.457
IPI00128491	Adenine phosphoribosyltransferase	Aprt	2	10	37	0.881	1.169	1.353
IPI00322415	DENN domain-containing protein 1A	Dennd1a	1	0.59	37	0.859	0.9	0.919
IPI00229065	bolA-like 3	Bola3	2	18.18	36	0.906	1.088	1.153
IPI00113271	dysferlin isoform 1	Dysf	2	1.1	36	0.974	1.218	1.216

IPI00120414	tumorous imaginal discs protein protein short form	Tid56-like	PF00226;P F01556	3	GSITNP CVVCR; TMDSSA GSK;VTI PVPAGV EDGQT VR	0.43845	0.923	1
IPI00467056	G1 to phase transition 2	Gspt2	2	2.22	36	0.916	1.226	1.475
IPI00110918	ribosomal protein; mitochondrial; S22	Mrps22	2	6.69	36	0.97	1.321	1.315
IPI00336509	Protein FAM114A2	Fam114a2	2	3.82	36	0.878	1.627	1.676
IPI00133095	epithelial membrane protein 2	Emp2	1	4.65	36	0.965	1.022	1.097
IPI00126048	proteasome 26S non-ATPase subunit 13	Psmc13	1	1.86	36	0.935	1.171	1.213
IPI00462291	high mobility group box 2	Hmgb2	3	11.9	36	0.867	1.692	1.689
IPI00454008	Serine hydroxymethyltransferase 2 (mitochondrial)	Shmt2	2	3.37	36	1.04	1.477	1.438
IPI00126175	S100 calcium binding protein A1	S100a1	1	7.45	36	0.925	1.298	1.265
IPI00310131	AP-2 complex subunit alpha-2	Ap2a2	2	2.24	36	0.928	1.539	1.489
IPI00115902	ribosomal protein L35a	LOC10004 8620	2	12.73	36	1.085	1.516	1.541
IPI00226466	DnaJ homolog subfamily C member 11	Dnajc11	3	3.04	36	0.885	1.184	1.168
IPI00226602	septin 6	Sep.06	1	2.33	36	0.956	1.481	1.583
IPI00139364	Splicing factor; arginine/serine-rich 4	Sfrs4	2	4.09	36	0.913	1.241	1.275
IPI00621027	collagen; type VI; alpha 2	Col6a2	2	1.93	36	0.943	1.397	1.346
IPI00118892	lymphocyte cytosolic protein 1	Lcp1	1	1.28	36	0.986	2.112	2.096
IPI00553419	desmoplakin	Dsp	4	0.73	36	0.911	1.368	1.14
IPI00263726	solute carrier family 2 (facilitated glucose transporter); member 4	Slc2a4	3	5.89	36	0.98	1.101	1.074
IPI00127942	destrin	Dstn	3	13.33	36	0.9	1.826	1.793
IPI00110721	Glyoxalase domain-containing protein 4	Glod4	3	10.74	36	0.959	1.379	1.32
IPI00133174	hypothetical protein LOC67998 isoform 1	Fam134c	2	5.15	36	0.883	1.181	1.249
IPI00114333	ribosomal protein S6 kinase polypeptide 3	Rps6ka3	2	2.57	35	0.991	1.83	1.826

IPI00132874	unnamed protein product	Mgll	3	10.91	35	1.099	1.471	1.443
IPI00381658	PREDICTED: similar to Chromobox homolog 3 (HP1 gamma homolog; Drosophila)	Gm5196	2	13.66	35	1.16	1.809	1.795
IPI00110990	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)	Dusp3	2	10.27	35	1.022	1.521	1.452
IPI00133066	proteasome 26S non-ATPase subunit 12	Psmc12	1	2.19	35	0.87	1.455	1.402
IPI00221663	bisphosphoglycerate mutase	Bpgm	2	5.02	35	0.968	0.906	0.924
IPI00223437	unnamed protein product	Copg	2	1.94	35	0.994	1.423	1.518
IPI00125939	acyl-CoA thioesterase 7 isoform 1	Acot7	2	8.07	35	0.973	1.36	1.453
IPI00113362	v-crk sarcoma virus CT10 oncogene homolog (avian)-like	Crkl	1	3.63	35	0.912	1.222	1.165
IPI00262743	glycoprotein; synaptic 2 isoform 1	Gpsn2	2	3.9	35	0.925	1.19	1.227
IPI00312128	tripartite motif protein 28	Trim28	1	0.96	35	0.987	1.947	1.96
IPI00867880	Purkinje cell protein 4-like 1	Pcp4l1	1	20.59	35	1.15	1.233	1.243
IPI00307991	v-crk sarcoma virus CT10 oncogene homolog	Crk	2	6.58	35	0.907	1.105	1.143
IPI00471325	endothelial differentiation-related factor 1	Edf1	2	11.49	35	0.864	1.206	1.141
IPI00672663	ATP-binding cassette sub-family B member 7; mitochondrial	Abcb7	2	2.39	35	0.912	1.152	1.14
IPI00330404	hypothetical protein LOC67383	2410127L1 7Rik	2	5.75	35	0.911	1.167	1.191
IPI00108884	PREDICTED: similar to high mobility group nucleosomal binding domain 2	Gm5899	1	8.43	34	1.134	1.583	1.475
IPI00118018	tangerin isoform a	Ehbp111	2	1.98	34	0.754	1.134	1.147
IPI00461641	PREDICTED: similar to ribosomal protein L27A	Gm5453	2	12.84	34	0.956	1.366	1.35
IPI00120924	Musashi homolog 2	Msi2	2	7.8	34	1.162	1.269	1.09
IPI00107913	unnamed protein product	Cmc1	2	14.39	34	0.867	0.964	0.962
IPI00109910	Ighg protein	Ighg	2	6.77	34	0.623	2.693	2.663
IPI00132217	tetratricopeptide repeat domain 11	Fis1	1	7.24	34	0.738	1.077	1.136
IPI00124292	brain protein 44-like	Brp44l	2	12.84	34	1.059	1.277	1.245
IPI00323674	squamous cell carcinoma antigen recognized by T-cells 1	Sart1	3	3.85	34	1.126	1.418	1.405

IPI00458879	leucine-rich repeat kinase 1	Lrrk1	1	0.35	34	0.88	0.857	0.846
IPI00132445	transmembrane protein 223	Tmem223	2	7.54	34	0.997	1.122	1.088
IPI00109293	lactamase; beta	LOC67714 4	2	3.27	34	1.016	1.157	1.167
IPI00127276	enoyl-Coenzyme A; hydratase/3-hydroxyacyl Coenzyme A dehydrogenase	Ehhadh	1	2.09	34	1.052	0.89	1.166
IPI00226766	protein phosphatase 1K (PP2C domain containing)	Ppm1k	1	3.23	34	0.906	1.513	1.53
IPI00406447	Collapsin response mediator protein 4A	Dpysl3	3	4.39	34	0.927	2.375	2.035
IPI00262488	cysteine-rich protein 1 (intestinal)	Crip1	2	19.48	34	1	1.322	1.35
IPI00515528	Zinc finger CCCH type containing 13	Zc3h13	1	0.58	34	0.918	1.084	1.092
IPI00162949	CDP-diacylglycerol-inositol 3-phosphatidyltransferase isoform 1	Cdipt	1	3.29	34	0.883	1.345	1.569
IPI00308706	ribosomal protein L5	Gm15500	3	6.73	34	0.905	1.261	1.241
IPI00406117	synaptotagmin binding; cytoplasmic RNA interacting protein isoform 1	Syncrip	3	4.82	34	0.816	1.308	1.344
IPI00654406	Autosomal Highly Conserved Protein	C78339	1	2.01	34	1.048	1.45	1.421
IPI00130339	HLA-B associated transcript 5	Bat5	3	6.81	33	1.012	1.336	1.266
IPI00668939	unnamed protein product	Armc2	2	2.09	33	0.965	1.188	1.166
IPI00853920	PREDICTED: similar to thioredoxin reductase 2	LOC10004 4101	2	5.94	33	1.031	0.844	1.168
IPI00118880	guanylate cyclase 1; soluble; beta 3 isoform 1	Gucy1b3	2	3.06	33	0.956	1.23	1.396
IPI00330348	minichromosome maintenance deficient 8	Mcm8	1	0.87	33	1.188	1.306	1.239
IPI00113394	PREDICTED: similar to Rps15a protein	LOC67684 7	1	4.26	33	0.965	1.562	1.541
IPI00123518	lysophospholipase 2	Lypla2	2	6.49	33	1.003	1.097	1.266
IPI00230277	mitogen activated protein kinase 3	Mapk3	2	6.84	33	1.129	1.229	1.199
IPI00113079	MAP kinase-activated protein kinase 2	Mapkapk2	2	4.4	33	1.007	1.52	1.429
IPI00116120	Programmed cell death protein 5	Pdcd5	3	14.06	33	1.191	1.726	1.665
IPI00311406	39S ribosomal protein L39; mitochondrial	Mrpl39	3	10.42	33	0.965	1.372	1.346

IPI00349513	part of a novel protein	Gm12258	1	2.65	32	0.945	0.899	0.889
IPI00172146	dimeric dihydrodiol dehydrogenase	Dhdh	1	3.6	32	0.979	1.242	1.133
IPI00128945	proteasome (prosome; macropain) subunit; beta type 2	Psmb2	1	5.47	32	1.022	1.436	1.41
IPI00331361	MYB binding protein (P160) 1a	Mybbp1a	3	2.31	32	1.092	1.37	1.4
IPI00403509	26S proteasome non-ATPase regulatory subunit 8	Psmd8	2	5.84	32	1.043	1.445	1.433
IPI00668613	PREDICTED: similar to centrosome-associated protein 350 isoform 5	Cep350	3	0.55	32	1.351	1.854	1.76
IPI00410957	Myosin-Vb	Myo5b	1	0.33	32	1.035	1.288	1.275
IPI00136883	unnamed protein product	Ptbp1	2	2.83	32	0.922	1.643	1.652