

**Supplementary Table 3: Global proteomic profiling of fertile control group in triplicate - Second run**

No.	Gel 2					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
1	semenogelin-2 precursor	4506885	65	54	73	2269
2	semenogelin-1 preproprotein	4506883	52	65	73	1646
3	A-kinase anchor protein 4 isoform 2	21493039	93	68	73	1235
4	lactotransferrin isoform 1 precursor	54607120	78	76	82	1137
5	tubulin beta-4B chain	5174735	50	33	72	953
6	fibronectin isoform 3 preproprotein	16933542	259	112	56	842
7	heat shock-related 70 protein 2	13676857	70	49	68	840
8	tubulin alpha-3C/D chain	17921993	50	34	68	682
9	keratin, type II cytoskeletal 1	119395750	66	39	60	672
10	actin, cytoplasmic 1	4501885	42	33	85	656
11	clusterin preproprotein	355594753	52	30	50	591
12	keratin, type I cytoskeletal 10	195972866	59	32	55	562
13	78 glucose-regulated protein precursor	16507237	72	37	56	560
14	heat shock protein HSP 90-alpha isoform 1	153792590	98	52	50	541
15	keratin, type I cytoskeletal 9	55956899	62	32	49	516
16	A-kinase anchor protein 3	21493041	95	48	58	513
17	keratin, type II cytoskeletal 2 epidermal	47132620	65	30	57	478
18	pyruvate kinase isozymes M1/M2 isoform c	332164775	66	39	67	456
19	heat shock cognate 71 protein isoform 1	5729877	71	17	45	436
20	endoplasmic precursor	4507677	92	49	52	430
21	ATP synthase subunit beta, mitochondrial precursor	32189394	57	31	75	427
22	prostatic acid phosphatase isoform TM- PAP precursor	197116348	48	18	32	425
23	alpha-enolase isoform 1	4503571	47	38	80	382
24	heat shock 70 protein 1-like	124256496	70	24	52	370
25	heat shock protein HSP 90-beta	20149594	83	20	45	359
26	protein disulfide-isomerase A3 precursor	21361657	57	39	71	343
27	heat shock 70 protein 1A/1B	194248072	70	15	48	342
28	tubulin beta-3 chain isoform 1	50592996	50	2	32	337
29	glyceraldehyde-3-phosphate dehydrogenase, testis-specific	7657116	45	20	76	331
30	prolactin-inducible protein precursor	4505821	17	14	77	317
31	fructose-bisphosphate aldolase A isoform 2	342187211	45	33	81	306
32	calcium-binding tyrosine phosphorylation-regulated protein isoform c	24797112	41	24	69	287
33	outer dense fiber protein 2 isoform 3	310750406	81	31	41	279
34	prostate-specific antigen isoform 1 preproprotein	4502173	29	15	69	276
35	tubulin beta chain	29788785	50	2	60	276
36	calcium-binding tyrosine phosphorylation-regulated protein isoform a	24797108	53	7	43	270
37	tubulin alpha-1A chain	17986283	50	2	59	257
38	keratin, type II cytoskeletal 6A	5031839	60	15	48	242

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Supplementary Table 3: Contd...

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
39	elongation factor 1-alpha 1	4503471	50	24	56	238
40	keratin, type II cytoskeletal 5	119395754	62	17	36	233
41	tubulin alpha-1C chain	14389309	50	2	55	230
42	keratin, type I cytoskeletal 14	15431310	52	11	34	228
43	keratin, type I cytoskeletal 13 isoform a	131412225	50	24	58	224
44	triosephosphate isomerase isoform 2	226529917	31	24	86	221
45	plastin-2	167614506	70	35	66	220
46	hypoxia up-regulated protein 1 precursor	5453832	111	40	40	210
47	ropporin-1A	21359920	24	14	77	207
48	leucine-rich repeat-containing protein 37B precursor	53829385	106	27	31	206
49	ATP synthase subunit alpha, mitochondrial precursor	4757810	60	28	51	197
50	aminopeptidase N precursor	157266300	110	44	47	196
51	pyruvate kinase isozymes M1/M2 isoform a	33286418	58	2	71	194
52	acetyl-CoA acetyltransferase, mitochondrial precursor	4557237	45	26	58	194
53	ruvB-like 2	5730023	51	28	61	193
54	annexin A1	4502101	39	25	66	188
55	T-complex protein 1 subunit beta isoform 1	5453603	57	31	67	187
56	60 heat shock protein, mitochondrial	31542947	61	34	71	186
57	malate dehydrogenase, mitochondrial precursor	21735621	36	21	68	185
58	myosin-9	12667788	227	64	37	182
59	fumarate hydratase, mitochondrial	19743875	55	27	65	177
60	creatine kinase B-type	21536286	43	18	60	167
61	angiotensin-converting enzyme isoform 1 precursor	4503273	150	32	30	166
62	heat shock protein beta-1	4504517	23	17	82	166
63	nuclear pore membrane glycoprotein 210-like isoform 1 precursor	117414168	211	54	36	165
64	phosphoglycerate kinase 2	31543397	45	26	69	164
65	glyceraldehyde-3-phosphate dehydrogenase	7669492	36	19	72	159
66	fatty acid synthase	41872631	273	37	14	158
67	annexin A5	4502107	36	23	73	157
68	uncharacterized protein C1orf56 precursor	20149646	37	13	48	156
69	T-complex protein 1 subunit gamma isoform a	63162572	61	24	53	150
70	annexin A2 isoform 1	50845388	40	25	55	149
71	leucine-rich repeat-containing protein 37A precursor	289547512	188	19	13	146
72	ruvB-like 1	4506753	50	22	60	143
73	acrosin-binding protein precursor	17999524	61	21	48	143
74	keratin, type I cytoskeletal 16	24430192	51	9	43	139
75	dipeptidyl peptidase 4	18765694	88	33	41	137
76	calreticulin precursor	4757900	48	19	63	137
77	transitional endoplasmic reticulum ATPase	6005942	89	30	49	136
78	glutathione S-transferase Mu 3	23065552	27	20	75	132
79	hexokinase-1 isoform HKI-ta/tb	15991831	103	34	37	130
80	aconitate hydratase, mitochondrial precursor	4501867	85	23	36	130
81	phospholipid hydroperoxide glutathione peroxidase, mitochondrial isoform A precursor	75709200	22	15	60	127
82	ropporin-1B	59891409	24	3	68	126
83	keratin, type II cytoskeletal 4	331999954	56	27	61	126
84	succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	156416003	73	25	43	125
85	tubulin beta-6 chain	14210536	50	3	18	121
86	sperm acrosome membrane-associated protein 1 precursor	13569934	32	9	42	118
87	sorbitol dehydrogenase	156627571	38	13	43	118
88	cytochrome b-c1 complex subunit 2, mitochondrial precursor	50592988	48	17	42	116
89	T-complex protein 1 subunit theta	48762932	60	30	53	116
90	lipoprotein lipase precursor	4557727	53	16	30	116
91	zona pellucida-binding protein 1 isoform 1 precursor	229577313	40	14	52	115

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Supplementary Table 3: Contd...

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
92	cathelicidin antimicrobial peptide preproprotein	348041314	20	12	51	115
93	trifunctional enzyme subunit beta, mitochondrial precursor	4504327	51	26	59	114
94	serum albumin preproprotein	4502027	69	32	60	113
95	14-3-3 protein epsilon	5803225	29	22	74	110
96	long-chain-fatty-acid--CoA ligase 1	40807491	78	24	38	109
97	clathrin heavy chain 1	4758012	192	37	28	107
98	pyruvate dehydrogenase E1 component subunit beta, mitochondrial isoform 1 precursor	156564403	39	14	47	106
99	elongation factor 1-gamma	4503481	50	16	49	104
100	sperm protein associated with the nucleus on the X chromosome B/F	22027492	12	8	81	102
101	cytochrome c oxidase subunit 4 isoform 1, mitochondrial precursor	4502981	20	15	58	100
102	ras-related protein Rab-2A isoform a	4506365	24	14	64	99
103	neutral alpha-glucosidase AB isoform 2 precursor	38202257	107	26	34	98
104	elongation factor 2	4503483	95	27	36	98
105	T-complex protein 1 subunit epsilon	24307939	60	26	57	98
106	trifunctional enzyme subunit alpha, mitochondrial precursor	20127408	83	25	39	97
107	T-complex protein 1 subunit delta	38455427	58	20	42	96
108	cysteine-rich secretory protein 1 isoform 1 precursor	327315372	28	11	43	96
109	peroxiredoxin-1	320461711	22	13	63	96
110	14-3-3 protein zeta/delta	4507953	28	12	65	96
111	dolichyl-diphosphooligosaccharide-- protein glycosyltransferase subunit 1 precursor	4506675	69	26	55	95
112	tektin-2	16507950	50	22	58	95
113	tektin-3	13994250	57	20	45	95
114	radial spoke head protein 6 homolog A	13540559	81	17	43	94
115	izumo sperm-egg fusion protein 4 isoform 1 precursor	89903025	24	9	50	94
116	sperm protein associated with the nucleus on the X chromosome C	13435137	11	11	91	93
117	saccharopine dehydrogenase-like oxidoreductase	55770836	47	15	49	93
118	erlin-2 isoform 1	6005721	38	20	57	92
119	protein disulfide-isomerase precursor	20070125	57	21	47	88
120	annexin A6 isoform 1	71773329	76	19	34	87
121	histone H2B type 1-A	24586679	14	9	50	87
122	cytosol aminopeptidase	41393561	56	25	63	87
123	protein FAM166A	48717426	36	16	55	86
124	laminin subunit beta-2 precursor	119703755	196	27	22	86
125	T-complex protein 1 subunit alpha isoform a	57863257	60	17	39	85
126	peroxiredoxin-6	4758638	25	14	64	84
127	sperm equatorial segment protein 1 precursor	21717832	39	12	33	84
128	L-lactate dehydrogenase C chain	4504973	36	17	52	82
129	T-complex protein 1 subunit eta isoform a	5453607	59	18	45	82
130	citrate synthase, mitochondrial precursor	38327625	52	17	49	82
131	NADH-ubiquinone oxidoreductase 75 subunit, mitochondrial isoform 1	33519475	79	19	32	80
132	gastricsin isoform 1 preproprotein	4505757	42	5	9.80	79
133	dihydrolipoyl dehydrogenase, mitochondrial precursor	91199540	54	17	48	76
134	carnitine O-palmitoyltransferase 2, mitochondrial precursor	4503023	74	24	47	76
135	valyl-tRNA synthetase	5454158	140	24	25	75
136	dynein light chain 2, cytoplasmic	18087855	10	5	65	74
137	histone H4	4504303	11	10	60	74
138	cAMP-dependent protein kinase type II- alpha regulatory subunit	4758958	46	16	50	74
139	dynein light chain 1, cytoplasmic	4505813	10	9	65	73
140	T-complex protein 1 subunit zeta-2 isoform 1	58331173	58	8	34	73
141	cAMP-dependent protein kinase type I- alpha regulatory subunit	4506063	43	14	41	72
142	ubiquitin-40S ribosomal protein S27a precursor	208022622	18	4	30	72
143	2,4-dienoyl-CoA reductase, mitochondrial precursor	4503301	36	13	50	72
144	mitochondrial inner membrane protein isoform 3	154354966	83	23	37	71
145	dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial precursor	31711992	69	20	38	71

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Supplementary Table 3: Contd...

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
146	keratin, type I cytoskeletal 17	4557701	48	5	25	70
147	6-phosphofructokinase type C isoform 1	11321601	86	23	34	68
148	vesicular integral-membrane protein VIP36 precursor	5803023	40	12	49	68
149	agrin precursor	54873613	215	27	21	67
150	serum amyloid P-component precursor	4502133	25	9	34	67
151	voltage-dependent anion-selective channel protein 2 isoform 2	296317339	32	12	53	67
152	cytosolic non-specific dipeptidase isoform 1	271398239	53	18	42	66
153	protein disulfide-isomerase A4 precursor	4758304	73	24	40	65
154	acrosomal protein SP-10 isoform a precursor	4501879	28	7	24	65
155	isocitrate dehydrogenase [NADP] cytoplasmic	28178825	47	16	37	63
156	calnexin precursor	10716563	68	18	31	63
157	cytochrome c oxidase subunit 5A, mitochondrial precursor	190885499	17	9	47	63
158	peptidyl-prolyl cis-trans isomerase A	10863927	18	11	67	63
159	cytochrome c oxidase subunit II	251831110	26	7	48	63
160	heat shock 70 protein 4L	31541941	95	21	33	63
161	hyaluronidase PH-20 isoform 2	291290981	58	8	20	63
162	laminin subunit alpha-5 precursor	21264602	400	29	10	62
163	dipeptidase 3 isoform a precursor	193211608	56	15	41	62
164	adipocyte plasma membrane-associated protein	24308201	46	15	50	61
165	plastin-3 isoform 1	209862851	71	9	24	61
166	erlin-1	154800487	39	9	38	61
167	radial spoke head 1 homolog	18254456	35	12	54	60
168	protein disulfide-isomerase A6 precursor	5031973	48	14	38	60
169	L-asparaginase	145275200	32	12	56	59
170	protein-glutamine gamma-glutamyltransferase 4	156627577	77	17	15	59
171	tektin-4	21389613	51	16	44	58
172	sperm protein associated with the nucleus on the X chromosome E	22027496	11	2	89	57
173	ezrin	21614499	69	11	21	56
174	14-3-3 protein sigma	5454052	28	10	49	56
175	stress-70 protein, mitochondrial precursor	24234688	74	14	29	56
176	annexin A3	4826643	36	11	35	55
177	peroxiredoxin-2 isoform a	32189392	22	11	42	55
178	adenylate kinase isoenzyme 1	4502011	22	11	55	55
179	ATP synthase subunit O, mitochondrial precursor	4502303	23	10	54	55
180	14-3-3 protein theta	5803227	28	10	56	54
181	sperm surface protein Sp17	8394343	17	8	75	53
182	plasma serine protease inhibitor precursor	194018472	46	14	39	53
183	alpha-actinin-4	12025678	105	19	27	53
184	myosin light polypeptide 6 isoform 2	88999583	17	9	76	53
185	succinyl-CoA: 3-ketoacid-coenzyme A transferase 1, mitochondrial precursor	4557817	56	13	32	53
186	epididymal sperm-binding protein 1 precursor	301601648	26	8	42	53
187	T-complex protein 1 subunit zeta isoform a	4502643	58	12	26	53
188	phosphoglycerate kinase 1	4505763	45	8	41	52
189	importin subunit beta-1	19923142	97	12	18	52
190	radial spoke head protein 9 homolog isoform 1	32964825	31	16	74	52
191	peroxiredoxin-5, mitochondrial isoform a precursor	6912238	22	11	56	52
192	laminin subunit gamma-1 precursor	145309326	178	21	19	52
193	cytochrome b-c1 complex subunit 1, mitochondrial precursor	46593007	53	15	35	52
194	myeloid leukemia factor 1 isoform 1	11967975	31	11	37	52
195	protein phosphatase 1 regulatory subunit 7	4506013	42	13	44	52
196	voltage-dependent anion-selective channel protein 3 isoform 1	25188179	31	12	39	51
197	very long-chain specific acyl-CoA dehydrogenase, mitochondrial isoform 2 precursor	76496475	68	15	28	51
198	ATP synthase subunit d, mitochondrial isoform a	5453559	18	9	78	51
199	dolichyl-diphosphooligosaccharide-- protein glycosyltransferase subunit 2 isoform 2 precursor	209413738	68	12	31	51
200	alpha-centractin	5031569	43	12	59	50

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**Supplementary Table 3: Contd...**

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
201	peptidyl-prolyl cis-trans isomerase B precursor	4758950	24	11	54	50
202	elongation factor 1-delta isoform 1	304555581	71	10	19	50
203	peroxiredoxin-4 precursor	5453549	31	13	56	49
204	cytochrome c oxidase subunit 5B, mitochondrial precursor	17017988	14	13	51	49
205	matrix-remodeling-associated protein 5 precursor	139948432	312	18	7.10	49
206	nucleobindin-2 precursor	4826870	50	14	46	49
207	D-3-phosphoglycerate dehydrogenase	23308577	57	8	17	47
208	single-stranded DNA-binding protein, mitochondrial precursor	4507231	17	10	59	47
209	olfactomedin-4 precursor	32313593	57	13	35	47
210	serpin B6	41152086	43	15	56	47
211	thioredoxin domain-containing protein 3	148839372	67	17	33	47
212	nuclear pore complex protein Nup155 isoform 1	24430149	155	16	15	46
213	vesicle-associated membrane protein- associated protein A isoform 2	94721252	28	9	49	46
214	calmodulin	58218968	17	11	81	46
215	WD repeat-containing protein 16 isoform b	124028512	68	15	34	46
216	uncharacterized protein KIAA1683 isoform a	224451032	147	17	16	45
217	electron transfer flavoprotein subunit alpha, mitochondrial isoform a	4503607	35	12	53	45
218	fructose-bisphosphate aldolase C	4885063	39	2	21	44
219	sperm acrosome membrane-associated protein 3	27777653	23	7	33	44
220	protein FAM71B	222418633	65	10	15	44
221	keratin, type II cytoskeletal 8	4504919	54	8	25	44
222	histone H2A type 1-A	25092737	14	6	35	43
223	beta-2-microglobulin precursor	4757826	14	4	38	43
224	actin-related protein T2	29893808	42	14	54	43
225	26S protease regulatory subunit 6A	21361144	49	13	31	43
226	isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial precursor	5031777	40	9	30	43
227	mucin-6 precursor	151301154	257	18	9.70	43
228	profilin-1	4826898	15	8	59	43
229	neprilysin	116256329	86	16	26	43
230	60S acidic ribosomal protein P0	16933546	34	12	47	42
231	axonemal dynein light intermediate polypeptide 1	37595560	32	11	40	42
232	26S proteasome non-ATPase regulatory subunit 13 isoform 1	157502193	43	14	47	40
233	keratin, type II cytoskeletal 6B	119703753	60	2	23	40
234	acrosin precursor	148613878	46	12	31	39
235	importin subunit alpha-2	4504897	58	13	40	39
236	outer dense fiber protein 3	19526475	28	12	51	39
237	26S protease regulatory subunit 4	24430151	49	11	22	38
238	nuclear pore complex protein Nup93 isoform 1	208609990	93	16	27	38
239	importin-5	24797086	126	12	16	38
240	glutathione S-transferase P	4504183	23	7	52	38
241	sperm-associated antigen 6 isoform 1	6912678	55	14	44	38
242	tripeptidyl-peptidase 2	186972143	138	16	20	37
243	carboxypeptidase Z isoform 2 precursor	62388875	73	12	26	37
244	glutamine synthetase	19923206	42	9	26	37
245	enkurin	21450721	29	8	46	37
246	dihydrolipoyllysine-residue succinyltransferase component of 2- oxoglutarate dehydrogenase complex, mitochondrial isoform 1 precursor	19923748	49	12	39	37
247	cofilin-1	5031635	19	8	64	36
248	26S proteasome non-ATPase regulatory subunit 7	25777615	37	8	39	36
249	L-lactate dehydrogenase A chain isoform 3	260099723	40	11	42	36
250	uncharacterized protein C20orf106 precursor	71043622	20	6	51	36
251	mitochondrial carrier homolog 2	7657347	33	8	40	35
252	dolichyl-diphosphooligosaccharide-- protein glycosyltransferase 48 subunit precursor	20070197	51	12	41	35
253	glucose-6-phosphate isomerase isoform 2	18201905	63	9	23	35
254	medium-chain specific acyl-CoA dehydrogenase, mitochondrial isoform b precursor	187960098	47	12	38	35
255	2-oxoglutarate dehydrogenase, mitochondrial isoform 3 precursor	259013553	116	14	20	35
256	malectin precursor	7661948	32	10	43	35
257	carboxypeptidase E preproprotein	4503009	53	7	13	34

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
258	electron transfer flavoprotein subunit beta isoform 1	4503609	28	12	53	34
259	transmembrane emp24 domain- containing protein 10 precursor	98986464	25	9	30	34
260	nuclear pore membrane glycoprotein 210 precursor	27477134	205	14	9.30	34
261	glucosidase 2 subunit beta isoform 1 precursor	48255889	59	10	20	34
262	keratin, type I cytoskeletal 19	24234699	44	4	28	34
263	aspartate aminotransferase, mitochondrial precursor	73486658	48	12	36	34
264	protein dpy-19 homolog 2	93277105	87	12	18	34
265	desmoplakin isoform I	58530840	332	19	9.80	34
266	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial precursor	4758788	30	10	40	33
267	ferritin, mitochondrial precursor	29126241	28	10	41	33
268	26S protease regulatory subunit 8 isoform 1	24497435	46	9	32	33
269	synaptophysin-like protein 1 isoform a	5803185	29	5	30	33
270	heme oxygenase 2	8051608	36	13	51	33
271	succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial precursor	115387094	32	10	32	33
272	maltase-glucoamylase, intestinal	221316699	210	12	9.40	33
273	enoyl-CoA hydratase, mitochondrial	194097323	31	11	45	33
274	prohibitin	4505773	30	9	42	33
275	reticulocalbin-2 precursor	4506457	37	8	45	33
276	transmembrane emp24 domain- containing protein 9 precursor	39725636	27	8	29	33
277	protein-L-isoaspartate (D-aspartate) O- methyltransferase isoform 2	354983493	30	9	49	33
278	coiled-coil domain-containing protein 19, mitochondrial precursor	81295816	66	11	24	33
279	calcium-binding and spermatid-specific protein 1	90652863	43	5	20	33
280	ubiquitin-like modifier-activating enzyme 1	23510340	118	12	7.90	32
281	histone H3.1	4504281	15	3	17	32
282	alcohol dehydrogenase [NADP+]	24497577	37	7	25	32
283	ADP-ribosylation factor 1	4502201	21	10	59	32
284	filamin-B isoform 2	105990514	278	17	9.10	32
285	26S proteasome non-ATPase regulatory subunit 2	25777602	100	13	21	31
286	nucleoporin p54	26051237	55	11	27	31
287	nucleoside diphosphate kinase homolog 5	4505413	24	6	49	31
288	ras-related protein Rab-11B	190358517	24	9	40	31
289	3-hydroxyisobutyrate dehydrogenase, mitochondrial precursor	23308751	35	6	30	31
290	chloride intracellular channel protein 1	14251209	27	7	34	31
291	ADP/ATP translocase 4	13775208	35	10	34	31
292	cytochrome c1, heme protein, mitochondrial	21359867	35	10	53	30
293	proteasome subunit alpha type-5 isoform 1	23110942	26	10	47	30
294	pyruvate dehydrogenase E1 component subunit alpha, testis-specific form, mitochondrial precursor	4885543	43	9	20	30
295	lysosomal alpha-glucosidase preproprotein	119393891	105	7	9.90	30
296	radial spoke head protein 3 homolog	31543559	64	7	17	30
297	ras-related protein Rab-2B isoform 1	21361884	24	3	50	30
298	hydroxyacylglutathione hydrolase, mitochondrial isoform 1 precursor	94538322	34	8	32	30
299	coiled-coil domain-containing protein 147	56961680	103	16	20	29
300	SYNJ2BP-COX16 protein isoform 1	321400118	21	6	26	29
301	hsc70-interacting protein	19923193	41	6	18	29
302	parkin coregulated gene protein isoform 2	122939202	29	9	44	29
303	26S protease regulatory subunit 10B	195539395	46	8	31	29
304	proteasome subunit alpha type-6	23110944	27	10	43	29
305	proteasome subunit beta type-5 isoform 1	4506201	28	9	39	28
306	delta (3,5)-Delta (2,4)-dienoyl-CoA isomerase, mitochondrial precursor	70995211	36	11	41	28
307	apolipoprotein A-I preproprotein	4557321	31	7	25	28
308	myosin-10	41406064	229	4	6.30	28
309	endophilin-B1 isoform 2	331284170	44	9	18	28
310	transmembrane protease serine 2 isoform 2	205360943	54	6	11	28
311	14-3-3 protein beta/alpha	21328448	28	3	35	28
312	lipid phosphate phosphohydrolase 1 isoform 1	29171736	32	3	19	28
313	dynein heavy chain 17, axonemal	256542310	509	14	4.50	28

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Supplementary Table 3: Contd...

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
314	eukaryotic initiation factor 4A-I isoform 1	4503529	46	8	22	28
315	carbonic anhydrase 4 precursor	4502519	35	5	15	27
316	hydroxyacyl-coenzyme A dehydrogenase, mitochondrial isoform 1 precursor	296179427	36	9	43	27
317	cytochrome b-c1 complex subunit 7 isoform 1	5454152	14	7	59	27
318	ATP synthase subunit b, mitochondrial precursor	21361565	29	9	41	27
319	4-trimethylaminobutyraldehyde dehydrogenase	115387104	56	8	16	27
320	adenylate kinase 7	148727333	83	10	21	27
321	alpha-actinin-1 isoform c	194097352	103	5	18	27
322	cullin-associated NEDD8-dissociated protein 1	21361794	136	11	12	27
323	dynein heavy chain 8, axonemal	332688227	539	11	2.60	27
324	uncharacterized protein C7orf61	51972226	24	5	34	27
325	26S protease regulatory subunit 6B isoform 1	5729991	47	7	25	26
326	mitochondria-eating protein	21687119	61	6	19	26
327	epididymal secretory protein E3-beta precursor	11641279	18	7	59	26
328	annexin A4	4502105	36	10	38	26
329	26S proteasome non-ATPase regulatory subunit 14	5031981	35	7	45	26
330	G-protein coupled receptor 64 isoform 2 precursor	119943116	110	7	10.00	26
331	alpha-mannosidase 2C1	46852164	116	11	13	26
332	abhydrolase domain-containing protein 10, mitochondrial precursor	8923001	34	5	26	26
333	plasma membrane calcium-transporting ATPase 4 isoform 4b	48255957	134	10	10	26
334	proteasome subunit alpha type-2	4506181	26	8	44	25
335	uncharacterized protein C20orf107 precursor	71043642	19	8	32	25
336	glycerol kinase 2	41393575	61	10	22	25
337	vesicle-fusing ATPase	156564401	83	13	22	25
338	proteasome subunit alpha type-1 isoform 1	23110935	30	10	37	25
339	phosphatidylethanolamine-binding protein 1 preproprotein	4505621	21	7	61	25
340	26S proteasome non-ATPase regulatory subunit 1 isoform 1	25777600	106	10	11	25
341	NADH-cytochrome b5 reductase 2	47778923	31	10	53	25
342	uromodulin precursor	59850812	70	8	13	25
343	proteasome subunit alpha type-4 isoform 1	4506185	29	9	42	25
344	kunitz-type protease inhibitor 3 precursor	189571689	10	3	29	25
345	sodium/potassium-transporting ATPase subunit beta-3	4502281	32	5	30	25
346	UPF0733 protein C2orf88	110349742	11	7	68	25
347	sodium/potassium-transporting ATPase subunit alpha-4 isoform 1	153946397	114	12	16	24
348	protein NDRG1	37655183	43	3	12	24
349	ES1 protein homolog, mitochondrial isoform 1a precursor	296531406	28	7	38	24
350	ubiquitin carboxyl-terminal hydrolase isozyme L3	5174741	26	7	40	24
351	proteasome subunit alpha type-7-like isoform 2	68303563	28	7	35	24
352	rho GDP-dissociation inhibitor 1 isoform a	4757768	23	6	38	24
353	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial isoform 1 precursor	20149568	51	9	25	24
354	leucine zipper transcription factor-like protein 1	9966793	35	8	34	24
355	adenosylhomocysteinase isoform 1	9951915	48	9	24	24
356	alanyl-tRNA editing protein Aarsd1 isoform 1	217416402	66	9	24	23
357	synaptic vesicle membrane protein VAT-1 homolog	18379349	42	8	28	23
358	ras-related protein Rab-14	19923483	24	9	49	23
359	tektin-1	16753231	48	10	29	23
360	calmegin precursor	4758004	70	9	21	23
361	proteasome subunit beta type-1	4506193	26	6	29	23
362	solute carrier family 2, facilitated glucose transporter member 14	23592238	56	7	13	23
363	coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial precursor	8923390	26	9	31	23
364	lysosome-associated membrane glycoprotein 1 precursor	112380628	45	4	9.80	23
365	26S protease regulatory subunit 7 isoform 1	4506209	49	9	27	23
366	protein S100-A9	4506773	13	6	53	23
367	14-3-3 protein gamma	21464101	28	2	26	23
368	dynactin subunit 2	5453629	45	8	26	23
369	26S proteasome non-ATPase regulatory subunit 11	28872725	47	7	18	22
370	protein DJ-1	31543380	20	9	47	22

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
371	protein FAM154A	301129242	55	5	16	22
372	glutathione reductase, mitochondrial isoform 1 precursor	50301238	56	9	31	22
373	sperm acrosome-associated protein 5 precursor	120952755	18	4	31	22
374	transmembrane protein 190 precursor	21040263	19	5	31	22
375	calpain small subunit 1	51599151	28	5	25	22
376	uncharacterized protein C9orf9	33285006	19	6	52	21
377	glypican-4 precursor	21614525	62	8	20	21
378	barrier-to-autointegration factor	4502389	10	6	63	21
379	signal peptidase complex subunit 2	162417971	25	6	15	21
380	short-chain specific acyl-CoA dehydrogenase, mitochondrial precursor	4557233	44	7	19	21
381	glutamate carboxypeptidase 2 isoform 1	4758398	84	9	19	21
382	vimentin	62414289	54	7	22	21
383	melanoma inhibitory activity protein 3 precursor	122891870	214	9	6.90	21
384	EF-hand domain-containing family member C2	31542743	87	7	9.90	21
385	transmembrane emp24 domain- containing protein 4 precursor	33457308	26	5	30	21
386	solute carrier family 2, facilitated glucose transporter member 3	5902090	54	3	14	21
387	lysyl-tRNA synthetase isoform 1	194272210	71	9	18	20
388	L-xylulose reductase isoform 1	7705925	26	8	37	20
389	carbonyl reductase [NADPH] 1	4502599	30	5	28	20
390	dnaJ homolog subfamily B member 11 precursor	7706495	41	9	27	20
391	CD59 glycoprotein preproprotein	187828910	14	4	25	20
392	cytochrome c	11128019	12	6	40	20
393	EF-hand domain-containing protein 1 isoform 1	156616292	74	7	15	20
394	carboxypeptidase D isoform 1 precursor	22202611	153	10	11	20
395	lactadherin isoform a preproprotein	167830475	43	8	26	20
396	testis-specific H1 histone	32401437	28	4	17	20
397	phosphoglycerate mutase 2	50593010	29	5	32	20
398	ATP synthase subunit gamma, mitochondrial isoform L (liver) precursor	50345988	33	6	24	20
399	LETM1 and EF-hand domain-containing protein 1, mitochondrial precursor	6912482	83	8	15	20
400	ADP/ATP translocase 2	156071459	33	5	29	20
401	beta-defensin 129 precursor	18250304	20	5	30	20
402	cytoplasmic dynein 1 heavy chain 1	33350932	532	12	2.90	20
403	mRNA export factor	62739173	41	7	18	20
404	isocitrate dehydrogenase [NAD] subunit beta, mitochondrial isoform a precursor	28178821	42	9	36	19
405	L-lactate dehydrogenase A-like 6B	15082234	42	5	22	19
406	stomatin-like protein 2	7305503	39	8	44	19
407	flavin reductase (NADPH)	4502419	22	3	24	19
408	isochorismatase domain-containing protein 2, mitochondrial isoform 2	13376007	24	5	48	19
409	calmin	19923599	112	6	6.80	19
410	testis-expressed protein 101 isoform 1	194018544	29	4	18	19
411	protein S100-A11	5032057	12	6	52	19
412	cytochrome b-c1 complex subunit Rieske, mitochondrial	163644321	30	7	29	19
413	pyruvate dehydrogenase protein X component, mitochondrial isoform 2	203098816	51	7	19	19
414	GTP-binding nuclear protein Ran	5453555	24	7	31	19
415	CDGSH iron-sulfur domain-containing protein 1	8923930	12	5	51	19
416	adenylate kinase 8	22749187	55	9	22	19
417	ras GTPase-activating-like protein IQGAP1	4506787	189	8	6.70	19
418	brain acid soluble protein 1	30795231	23	5	35	19
419	glypican-1 precursor	167001141	62	8	22	19
420	uncharacterized protein C9orf24 isoform 1	21362074	30	5	20	19
421	prostate and testis expressed protein 1 precursor	19923082	14	6	48	19
422	proteasome subunit beta type-4	22538467	29	7	45	19
423	bifunctional aminoacyl-tRNA synthetase	62241042	171	9	7.30	19
424	receptor expression-enhancing protein 6	19923919	21	6	27	19
425	voltage-dependent anion-selective channel protein 1	4507879	31	4	16	19

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
426	tetratricopeptide repeat protein 25	13899233	77	6	8.20	18
427	collagen alpha-1(XVIII) chain isoform 1 precursor	110611235	154	6	7.00	18
428	thioredoxin-related transmembrane protein 4 precursor	40254947	39	4	12	18
429	eukaryotic translation initiation factor 5A-1 isoform B	219555712	17	4	23	18
430	enoyl-CoA delta isomerase 1, mitochondrial isoform 2 precursor	295842266	31	6	22	18
431	proteasome subunit beta type-7 proprotein	4506203	30	7	36	18
432	rab GDP dissociation inhibitor beta isoform 1	6598323	51	5	19	18
433	endoplasmic reticulum resident protein 29 isoform 1 precursor	5803013	29	7	39	18
434	membrane-associated progesterone receptor component 2	291621647	26	4	17	18
435	extracellular matrix protein 1 isoform 3 precursor	322302700	64	7	15	18
436	ras-related protein Rab-27B	5729997	25	7	36	18
437	40S ribosomal protein S3a	4506723	30	5	21	18
438	phosphoglycerate mutase 1	4505753	29	2	29	18
439	thioredoxin isoform 1	50592994	12	6	43	18
440	coiled-coil domain-containing protein 63	22749217	66	7	14	17
441	sodium/potassium-transporting ATPase subunit alpha-2 proprotein	4502271	112	2	11	17
442	proteasome subunit alpha type-3 isoform 2	23110939	28	6	31	17
443	succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial precursor	11321583	50	5	8.20	17
444	galectin-3-binding protein precursor	5031863	65	6	13	17
445	eukaryotic translation initiation factor 3 subunit F	4503519	38	5	17	17
446	6-phosphogluconate dehydrogenase, decarboxylating	40068518	53	6	12	17
447	complement component 1 Q subcomponent-binding protein, mitochondrial precursor	4502491	31	5	32	17
448	long-chain-fatty-acid--CoA ligase 6 isoform e	327412327	79	7	13	17
449	translin	4759270	26	5	32	17
450	nicastrin precursor	24638433	78	6	10	17
451	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial precursor	4758792	14	4	52	17
452	transmembrane and coiled-coil domain- containing protein 2	56847610	20	4	27	17
453	nuclear pore glycoprotein p62	24497605	53	4	12	17
454	dnaJ homolog subfamily B member 8	23503241	26	6	31	17
455	BPI fold-containing family A member 3 isoform 1 precursor	109627654	28	5	28	17
456	mitochondrial import receptor subunit TOM22 homolog	9910382	16	5	66	17
457	neutrophil defensin 3 preproprotein	4885179	10	4	20	17
458	alpha-1-antitrypsin precursor	50363217	47	7	24	17
459	leukocyte surface antigen CD47 isoform 1 precursor	4502673	35	3	8.70	17
460	aldose reductase	4502049	36	4	16	17
461	signal peptidase complex subunit 3	11345462	20	5	21	17
462	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8	7657369	20	5	38	17
463	pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial isoform 3 precursor	291084744	44	3	19	17
464	FUN14 domain-containing protein 2	24371248	21	6	33	16
465	large proline-rich protein BAG6 isoform a	149158692	119	7	11	16
466	10 heat shock protein, mitochondrial	4504523	11	7	63	16
467	beta-lactamase-like protein 2	7705793	33	5	22	16
468	endoplasmic reticulum resident protein 44 precursor	52487191	47	6	20	16
469	proteasome activator complex subunit 1 isoform 1	5453990	29	6	33	16
470	uncharacterized protein C2orf57	284413778	42	4	8.60	16
471	sperm acrosome membrane-associated protein 4 precursor	19424138	13	2	22	16
472	ADP-ribosylation factor 4	4502205	21	3	47	16
473	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 10	4758774	21	5	30	16
474	aspartyl aminopeptidase	156416028	53	7	20	16
475	exportin-7	154448892	124	8	8.90	16
476	tektin-5	21389569	56	6	18	16
477	copper homeostasis protein cutC homolog	148596990	29	6	41	16
478	zinc-alpha-2-glycoprotein precursor	4502337	34	8	32	16
479	epididymal secretory protein E1 precursor	5453678	17	4	38	16
480	gamma-glutamyltranspeptidase 1 precursor	73915090	61	7	13	16

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
481	vesicle-associated membrane protein 3	4759300	11	5	41	16
482	ropporin-1-like protein	17572807	26	6	30	16
483	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial precursor	222080062	27	6	32	16
484	stress-induced-phosphoprotein 1	5803181	63	6	14	16
485	slit homolog 2 protein precursor	4759146	170	7	8.20	16
486	apolipoprotein A-IV precursor	71773110	45	7	23	16
487	regenerating islet-derived protein 3- gamma precursor	38348213	19	4	34	16
488	UTP--glucose-1-phosphate uridylyltransferase isoform b	48255968	56	6	14	16
489	calicin	169636428	67	6	11	16
490	protein S100-A8	21614544	11	4	39	15
491	von Willebrand factor A domain- containing protein 1 isoform 1 precursor	40068485	47	4	17	15
492	adenylyl cyclase-associated protein 1	5453595	52	6	16	15
493	prenylcysteine oxidase 1 precursor	166795301	57	6	17	15
494	acrosome formation-associated factor isoform 1	239582757	33	4	21	15
495	cathepsin F precursor	6042196	53	5	8.50	15
496	dnaJ homolog subfamily B member 1	5453690	38	5	18	15
497	hypoxanthine-guanine phosphoribosyltransferase	4504483	25	5	26	15
498	myosin regulatory light chain 12B	15809016	20	6	45	15
499	L-lactate dehydrogenase B chain	4557032	37	5	22	15
500	EGF-like repeat and discoidin I-like domain-containing protein 3 precursor	31317224	54	7	16	15
501	protein ERGIC-53 precursor	5031873	58	4	13	15
502	26S proteasome non-ATPase regulatory subunit 12 isoform 1	4506221	53	7	19	15
503	translin-associated protein X	5174731	33	5	30	15
504	nuclear migration protein nudC	5729953	38	6	21	15
505	glycerophosphodiester phosphodiesterase 1	7706617	38	4	16	15
506	UPF0468 protein C16orf80	8392875	23	5	17	15
507	calmodulin-like protein 5	223278387	16	5	44	15
508	26S proteasome non-ATPase regulatory subunit 3	25777612	61	7	11	14
509	transcription factor A, mitochondrial precursor	4507401	29	5	21	14
510	deoxyguanosine kinase, mitochondrial isoform a precursor	18426967	32	4	16	14
511	coiled-coil domain-containing protein 105	226492892	57	6	13	14
512	hornerin	57864582	282	4	2.10	14
513	membrane-associated progesterone receptor component 1	5729875	22	5	34	14
514	T-complex protein 11 homolog isoform 1	148226214	57	7	26	14
515	eukaryotic translation initiation factor 3 subunit I	4503513	37	6	28	14
516	CD177 antigen precursor	110735433	46	5	17	14
517	mesencephalic astrocyte-derived neurotrophic factor precursor	299523086	21	5	24	14
518	ribonuclease inhibitor	42822872	50	5	8.90	14
519	annexin A11	22165431	54	6	16	14
520	testis, prostate and placenta-expressed protein isoform 2 precursor	154759245	31	6	33	14
521	ras-related protein Rab-7a	34147513	23	4	23	14
522	cAMP-dependent protein kinase catalytic subunit alpha isoform 2	46909584	40	4	18	13
523	histone H1t	20544168	22	4	22	13
524	NME1-NME2 protein	66392203	30	5	21	13
525	kinectin isoform a	33620775	156	8	7.30	13
526	cullin-3	4503165	89	6	11	13
527	serine protease 58 precursor	48255915	27	4	18	13
528	nidogen-1 precursor	115298674	136	6	8.10	13
529	malate dehydrogenase, cytoplasmic isoform 1	312283701	39	5	21	13
530	V-type proton ATPase catalytic subunit A	19913424	68	3	8.60	13
531	dnaJ homolog subfamily A member 4 isoform 2	194328760	45	6	22	13
532	erythrocyte band 7 integral membrane protein isoform a	38016911	32	6	30	13
533	transcription elongation factor B polypeptide 2 isoform b	46276893	18	4	34	13
534	adenylate kinase domain-containing protein 1 isoform 1	237858799	221	8	6.50	13
535	ubiquitin carboxyl-terminal hydrolase 7	150378533	128	5	7.60	13

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Supplementary Table 3: Contd...

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
536	lysosome membrane protein 2 isoform 1 precursor	5031631	54	3	11	13
537	phosphate carrier protein, mitochondrial isoform b precursor	47132595	40	4	14	13
538	gelsolin isoform a precursor	4504165	86	3	5.90	13
539	sarcoplasmic/endoplasmic reticulum calcium ATPase 2 isoform b	24638454	115	6	8.10	13
540	ras-related protein Rab-3D	4759000	24	3	26	13
541	rab GDP dissociation inhibitor alpha	4503971	51	2	15	13
542	60S acidic ribosomal protein P2	4506671	12	5	73	12
543	kallikrein-2 isoform 1 precursor	5031829	29	3	17	12
544	dynactin subunit 1 isoform 1	13259510	142	5	6.00	12
545	proteasome subunit beta type-3	22538465	23	5	39	12
546	superoxide dismutase [Mn], mitochondrial isoform A precursor	67782305	25	5	24	12
547	dnaJ homolog subfamily A member 2	5031741	46	5	20	12
548	protein NipSnap homolog 3A	22267436	28	4	24	12
549	translationally-controlled tumor protein	4507669	20	4	47	12
550	programmed cell death protein 6	7019485	22	4	25	12
551	prostasin preproprotein	4506153	36	3	12	12
552	EF-hand calcium-binding domain- containing protein 6 isoform a	38570107	173	4	4.20	12
553	NADH dehydrogenase [ubiquinone] iron-sulfur protein 8, mitochondrial precursor	4505371	24	4	19	12
554	endoplasmic reticulum-Golgi intermediate compartment protein 3 isoform a	38327615	44	6	16	12
555	40S ribosomal protein S2	15055539	31	6	23	12
556	glucosamine--fructose-6-phosphate aminotransferase [isomerizing] 1 isoform 1	347659028	79	6	8.30	12
557	kelch-like protein 10	148664209	69	4	9.50	12
558	disintegrin and metalloproteinase domain-containing protein 7 preproprotein	114326453	86	6	10	12
559	septin-7 isoform 2	148352329	51	4	14	12
560	26S proteasome non-ATPase regulatory subunit 4	5292161	41	5	18	12
561	nucleoporin NUP53	31982904	35	6	28	12
562	ATP synthase subunit delta, mitochondrial precursor	50345991	17	2	14	12
563	pro-cathepsin H preproprotein	23110955	37	3	11	12
564	ubiquitin carboxyl-terminal hydrolase 14 isoform b	82880645	52	5	12	12
565	protein arginine N-methyltransferase 5 isoform a	20070220	73	7	15	12
566	glyoxylate reductase/hydroxypyruvate reductase	6912396	36	6	26	12
567	arfaptin-1 isoform 1	71040094	42	3	8.00	12
568	galectin-7	109948279	15	5	52	12
569	alpha-crystallin B chain	4503057	20	4	26	11
570	peptidyl-prolyl cis-trans isomerase FKBP4	4503729	52	6	18	11
571	epididymal secretory protein E3-alpha precursor	11386189	18	4	23	11
572	alpha-soluble NSF attachment protein	47933379	33	6	32	11
573	cytochrome c oxidase subunit 6B1	4502985	10	4	57	11
574	basigin isoform 2 precursor	38372925	29	4	23	11
575	tryptophanyl-tRNA synthetase, cytoplasmic isoform b	47419918	49	5	20	11
576	heterogeneous nuclear ribonucleoprotein M isoform a	14141152	78	6	8.90	11
577	transmembrane emp24 domain- containing protein 7 precursor	32996709	25	4	20	11
578	ras-related protein Ral-A precursor	33946329	24	3	16	11
579	interferon-inducible GTPase 5	10257429	50	4	14	11
580	signal peptidase complex catalytic subunit SEC11A	7657609	21	3	26	11
581	nucleoporin p58/p45 isoform a	30102928	61	4	10	11
582	poly (rC)-binding protein 1	222352151	37	4	9.30	11
583	ecto-ADP-ribosyltransferase 3 isoform a precursor	194097380	44	4	12	11
584	stromal cell-derived factor 2-like protein 1 precursor	56243533	24	4	29	11
585	methionyl-tRNA synthetase, cytoplasmic	14043022	101	5	7.00	11
586	glycogen phosphorylase, brain form	21361370	97	4	3.80	11
587	eukaryotic translation elongation factor 1 epsilon-1 isoform 1	4758862	20	5	26	11
588	F-actin-capping protein subunit beta isoform 1	4826659	31	3	16	11
589	cystatin-B	4503117	11	4	55	11
590	dnaJ homolog subfamily B member 6 isoform b	4885495	27	3	20	11

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
591	brain protein 44-like protein 2	306922396	15	4	42	11
592	26S proteasome non-ATPase regulatory subunit 6	7661914	46	5	17	11
593	protein FAM71A	282721094	63	4	7.10	11
594	V-type proton ATPase subunit B, brain isoform	19913428	57	4	14	11
595	isovaleryl-CoA dehydrogenase, mitochondrial isoform 1 precursor	226958412	47	5	21	11
596	ATP-citrate synthase isoform 1	38569421	121	8	3.60	11
597	nucleosome assembly protein 1-like 4	5174613	43	4	15	11
598	mitochondrial dicarboxylate carrier	20149598	31	3	15	11
599	tubulin polymerization-promoting protein family member 2	226491350	19	4	44	11
600	probable inactive serine protease 37 isoform 1 precursor	285394164	26	4	21	11
601	coiled-coil domain-containing protein 151	117553613	69	6	14	11
602	UPF0556 protein C19orf10 precursor	33457348	19	4	27	11
603	prelamin-A/C isoform 2	5031875	65	4	9.40	11
604	F-actin-capping protein subunit alpha-2	5453599	33	2	15	11
605	anterior gradient protein 2 homolog precursor	5453541	20	4	30	10
606	DPY30 domain-containing protein 1	20270377	21	5	33	10
607	ras-related protein Rab-1B	13569962	22	4	29	10
608	ras-related protein Rab-3B	19923750	25	4	21	10
609	proteasome subunit beta type-6	23110925	25	4	17	10
610	adenylate kinase 2, mitochondrial isoform a	4502013	26	5	29	10
611	serine/threonine-protein phosphatase PP1-beta catalytic subunit isoform 1	4506005	37	3	11	10
612	glycodelin precursor	65507501	21	3	24	10
613	transmembrane protein 89 precursor	56847630	18	3	17	10
614	histone H2A-Bbd type 2/3	63029935	13	4	57	10
615	casein kinase II subunit alpha isoform a	29570791	45	4	17	10
616	metalloproteinase inhibitor 1 precursor	4507509	23	5	32	10
617	speriolin isoform 1	197276668	62	4	9.80	10
618	ATP synthase subunit g, mitochondrial	51479156	11	4	43	10
619	sortilin isoform 1 preproprotein	17149834	92	4	6.00	10
620	UBX domain-containing protein 11 isoform 1	116734681	54	4	16	10
621	fragile X mental retardation 1 neighbor protein	22749199	29	2	12	10
622	40S ribosomal protein S8	4506743	24	4	18	10
623	A disintegrin and metalloproteinase with thrombospondin motifs 1 preproprotein	50845384	105	4	6.80	10
624	3-ketoacyl-CoA thiolase, mitochondrial	167614485	42	4	17	10
625	diablo homolog, mitochondrial isoform 1 precursor	9845297	27	4	24	10
626	40S ribosomal protein S3	15718687	27	4	19	10
627	calpain-1 catalytic subunit	311893363	82	5	7.10	10
628	ADP-ribosyl cyclase 1	38454326	34	2	7.70	10
629	myotrophin	21956645	13	3	31	10
630	transmembrane emp24 domain- containing protein 2 precursor	5803149	23	2	18	10
631	proteasome activator complex subunit 4	163644283	211	6	4.90	10
632	UPF0740 protein C1orf192	63029930	19	3	22	10
633	matrilin-2 isoform a precursor	62548860	107	4	6.00	10
634	72 type IV collagenase isoform a preproprotein	11342666	74	2	4.70	10
635	glutathione S-transferase Mu 1 isoform 1	23065544	26	3	19	10
636	cathepsin D preproprotein	4503143	45	4	14	10
637	profilin-2 isoform a	16753215	15	4	26	10
638	aquaporin-5	4502183	28	2	9.80	10
639	ubiquitin-conjugating enzyme E2 N	4507793	17	3	24	10
640	cystatin-C precursor	4503107	16	3	19	10
641	general vesicular transport factor p115	4505541	108	5	6.90	9
642	ribonuclease-like protein 13 precursor	59276062	18	2	13	9
643	serine/threonine-protein phosphatase with EF-hands 1 isoform 1b	23312374	73	3	8.20	9
644	transcription elongation factor B polypeptide 1 isoform a	325652033	12	3	41	9
645	serine/threonine-protein phosphatase PGAM5, mitochondrial isoform 1	281604136	32	3	12	9

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Supplementary Table 3: Contd...

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
646	aspartate aminotransferase, cytoplasmic	4504067	46	4	17	9
647	receptor expression-enhancing protein 5	115430112	21	4	20	9
648	ATPase inhibitor, mitochondrial isoform 1 precursor	7705927	12	3	15	9
649	retinoid-inducible serine carboxypeptidase precursor	11055992	51	3	8.80	9
650	histidine triad nucleotide-binding protein 2, mitochondrial precursor	14211923	17	3	28	9
651	COP9 signalosome complex subunit 4	38373690	46	4	12	9
652	C-Myc-binding protein	57242777	12	3	39	9
653	tomoregulin-2 precursor	12383051	41	3	8.00	9
654	45 calcium-binding protein isoform 2 precursor	18699732	42	4	17	9
655	cytochrome b-c1 complex subunit 6, mitochondrial	83627705	11	4	56	9
656	sulfatase-modifying factor 2 isoform e precursor	194248090	39	3	11	9
657	ras-related protein Rab-5C isoform a	41393614	23	4	26	9
658	actin-related protein M1	221139714	41	4	19	9
659	serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform	4506017	36	3	17	9
660	casein kinase II subunit beta	23503295	25	5	25	9
661	bifunctional ATP-dependent dihydroxyacetone kinase/FAD-AMP lyase (cyclizing)	20149621	59	3	8.30	9
662	uncharacterized protein C9orf171	46409466	36	3	11	9
663	60S ribosomal protein L12	4506597	18	3	25	9
664	prenylated Rab acceptor protein 1	222144309	21	3	18	9
665	inositol monophosphatase 1 isoform 2	221625487	37	4	18	9
666	apolipoprotein D precursor	4502163	21	4	23	9
667	60S ribosomal protein L7a	4506661	30	3	15	9
668	cytochrome c oxidase subunit 7A2, mitochondrial precursor	262118227	13	3	22	9
669	dynein light chain 1, axonemal isoform 1	164607156	22	3	18	9
670	EF-hand calcium-binding domain- containing protein 1 isoform a	13375787	24	3	23	9
671	BAG family molecular chaperone regulator 5 isoform b	6631077	51	4	13	9
672	HD domain-containing protein 2	116875826	23	5	30	9
673	dihydropteridine reductase	208973246	26	4	27	9
674	PREDICTED: hypothetical protein LOC728597	341914388	72	3	4.90	9
675	thioredoxin domain-containing protein 2 isoform 2	148727319	60	3	4.90	9
676	trafficking protein particle complex subunit 3	7656926	20	3	17	9
677	syntaxin-12	28933465	32	5	33	9
678	complement decay-accelerating factor isoform 2 precursor	168693643	49	5	15	9
679	cystatin-S precursor	4503109	16	3	26	9
680	eukaryotic translation initiation factor 6 isoform a	4504771	27	3	23	9
681	mammaglobin-B precursor	4505171	11	3	40	9
682	keratin, type I cytoskeletal 18	4557888	48	2	11	8
683	F-actin-capping protein subunit alpha-1	5453597	33	3	14	8
684	lysozyme-like protein 4 precursor	21389465	16	3	23	8
685	thioredoxin reductase 2, mitochondrial precursor	22035672	57	4	15	8
686	heme-binding protein 2	7657603	23	5	24	8
687	cadherin-1 preproprotein	4757960	97	4	8.60	8
688	serine/threonine-protein phosphatase 2A activator isoform b	29725611	37	3	17	8
689	40S ribosomal protein S9	14141193	23	4	16	8
690	superoxide dismutase [Cu-Zn]	4507149	16	3	21	8
691	aspartyl-tRNA synthetase, cytoplasmic	45439306	57	5	13	8
692	mitochondrial import receptor subunit TOM34	21361356	35	3	14	8
693	tropomyosin alpha-3 chain isoform 2	24119203	29	3	17	8
694	ran-specific GTPase-activating protein	4506407	23	3	15	8
695	peptidyl-prolyl cis-trans isomerase F, mitochondrial precursor	5031987	22	3	21	8
696	lipase member I	39752679	55	3	6.70	8
697	ras-related protein Rab-6A isoform b	38679888	24	3	16	8
698	glycyl-tRNA synthetase precursor	116805340	83	4	8.40	8
699	transmembrane protein 205	63055043	21	2	16	8
700	uncharacterized protein C9orf135	58219541	26	4	25	8

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
701	60S ribosomal protein L7	15431301	29	4	23	8
702	ras-related protein Rab-5B isoform 1	354725902	24	2	18	8
703	non-specific lipid-transfer protein isoform 1 proprotein	19923233	59	4	7.30	8
704	beta-microseminoprotein isoform a precursor	4557036	13	4	21	8
705	spermatogenesis-associated protein 19, mitochondrial precursor	28376652	19	3	24	8
706	proteasome activator complex subunit 2	30410792	27	4	23	8
707	S-phase kinase-associated protein 1 isoform b	25777713	19	4	30	8
708	carnitine O-palmitoyltransferase 1, muscle isoform isoform a	223468678	88	3	5.10	8
709	nucleoside diphosphate kinase 7 isoform a	7019465	42	3	11	8
710	calcium-binding mitochondrial carrier protein Aralar1	21361103	75	3	6.00	8
711	thiamine-triphosphatase	13236577	26	3	18	8
712	carboxylesterase 5A isoform 1 precursor	219521907	64	3	7.50	8
713	DNA damage-binding protein 1	148529014	127	6	8.50	8
714	GTP-binding protein SAR1a	217416369	22	4	27	8
715	dolichyl-diphosphooligosaccharide-- protein glycosyltransferase subunit STT3A	22749415	81	4	5.50	8
716	junction plakoglobin	12056468	82	5	8.70	8
717	myosin light chain 6B	313851001	23	2	18	8
718	nucleotide exchange factor SIL1 precursor	11968009	52	3	7.80	7
719	myeloperoxidase precursor	4557759	84	4	6.80	7
720	histidine triad nucleotide-binding protein 1	4885413	14	3	33	7
721	acid ceramidase isoform b	189011546	47	3	11	7
722	actin-like protein 7A	5729720	49	4	15	7
723	atlastin-3	45827806	61	3	11	7
724	annexin A7 isoform 1	4502111	50	3	8.20	7
725	3-mercaptopyruvate sulfurtransferase isoform 2	61835204	33	3	19	7
726	leucine-rich repeat-containing protein 23 isoform a	42542396	40	3	16	7
727	importin-4	62460637	119	4	5.90	7
728	Sjoegren syndrome nuclear autoantigen 1	189571687	14	3	26	7
729	nucleophosmin isoform 1	10835063	33	3	19	7
730	gamma-glutamyl hydrolase precursor	4503987	36	3	11	7
731	fumarylacetoacetate hydrolase domain- containing protein 2B	40786394	35	3	17	7
732	sperm-associated antigen 16 protein isoform 1	70909324	71	4	11	7
733	dipeptidase 1 precursor	4758190	46	3	13	7
734	heterogeneous nuclear ribonucleoprotein K isoform b	14165435	51	3	11	7
735	SPARC-related modular calcium-binding protein 2 isoform 1 precursor	24308277	51	5	19	7
736	protein DPCD	39930355	23	3	14	7
737	ubiquitin-conjugating enzyme E2 L3	4507789	18	3	30	7
738	endoplasmic reticulum lectin 1 isoform 2 precursor	188528696	52	3	8.10	7
739	protein FAM3B isoform a precursor	46255030	26	3	16	7
740	coiled-coil domain-containing protein 42A isoform 1	226494053	38	3	15	7
741	elongation factor 1-beta	4503477	25	2	27	7
742	retinal dehydrogenase 1	21361176	55	3	9.00	7
743	60S ribosomal protein L23	4506605	15	3	27	7
744	spermatid-associated protein	22749425	52	3	7.10	7
745	multifunctional protein ADE2 isoform 2	5453539	47	3	11	7
746	perilipin-3 isoform 1	255958282	47	3	9.90	7
747	quinone oxidoreductase isoform a	13236495	35	3	11	7
748	CMT1A duplicated region transcript 15 protein	56090618	21	3	32	7
749	ras-related protein Rab-18	10880989	23	3	17	7
750	transthyretin precursor	4507725	16	3	31	6
751	lactoylglutathione lyase	118402586	21	3	13	6
752	26S proteasome non-ATPase regulatory subunit 8	156631005	40	4	12	6
753	40S ribosomal protein SA	59859885	33	2	10	6
754	acyl-CoA-binding protein isoform 5	295842514	14	2	28	6
755	3-hydroxyacyl-CoA dehydrogenase type-2 isoform 1	4758504	27	2	15	6

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**Supplementary Table 3: Contd...**

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
756	translocon-associated protein subunit alpha precursor	169404009	32	3	12	6
757	40S ribosomal protein S18	11968182	18	2	13	6
758	40S ribosomal protein S16	4506691	16	3	21	6
759	dnaJ homolog subfamily B member 13	39204547	36	2	9.80	6
760	cytochrome c oxidase subunit 6C proprotein	4758040	9	2	28	6
761	izumo sperm-egg fusion protein 2 precursor	63999117	25	2	11	6
762	acylamino-acid-releasing enzyme	23510451	81	3	7.00	6
763	serine/threonine-protein phosphatase 2A 65 regulatory subunit A alpha isoform	21361399	65	4	8.70	6
764	uncharacterized protein C6orf81	31542280	41	2	7.60	6
765	acyl-coenzyme A thioesterase 13 isoform 2	231567183	12	2	26	6
766	dynein light chain roadblock-type 2	18702323	11	2	34	6
767	purine nucleoside phosphorylase	157168362	32	3	13	6
768	acyl carrier protein, mitochondrial precursor	4826852	17	2	12	6
769	ubiquitin thioesterase OTUB1	109148508	31	2	7.00	6
770	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7	10764847	16	3	20	6
771	dynein heavy chain 7, axonemal	151301127	461	2	0.84	6
772	ubiquitin thioesterase OTUB2	12962939	27	2	9.00	6
773	midkine precursor	4505135	16	2	12	6
774	spondin-2 precursor	6912682	36	2	5.10	6
775	vitronectin precursor	88853069	54	2	5.20	6
776	aflatoxin B1 aldehyde reductase member 2	41327764	40	2	8.60	6
777	translocon-associated protein subunit delta isoform 3 precursor	325301078	20	2	13	6
778	apolipoprotein O precursor	13129148	22	2	11	6
779	ferritin heavy chain	56682959	21	2	9.80	6
780	puromycin-sensitive aminopeptidase	158937236	103	4	2.60	6
781	thioredoxin domain-containing protein 17	14249348	14	3	27	6
782	voltage-dependent calcium channel subunit alpha-2/delta-2 isoform c	291290994	130	4	5.00	6
783	UPF0577 protein KIAA1324 precursor	38569482	111	4	4.00	6
784	homogentisate 1,2-dioxygenase	115527117	50	2	8.10	6
785	transketolase-like protein 1 isoform b	225637461	65	2	5.10	6
786	ATP synthase subunit epsilon, mitochondrial	5901896	6	3	45	6
787	protein FAM162A	49355721	17	2	20	6
788	thiosulfate sulfurtransferase/rhodanese-like domain-containing protein 1 isoform 1	163965377	13	2	20	6
789	high mobility group protein B2 .	194688133	24	3	19	6
790	60S ribosomal protein L11 isoform 1	15431290	20	2	13	6
791	transketolase-like protein 2	133778974	68	2	5.60	6
792	prostate and testis expressed protein 2 precursor	47086459	13	2	27	6
793	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial precursor	4505369	20	2	14	6
794	agouti-related protein precursor	4501995	14	2	14	6
795	dolichyl-diphosphooligosaccharide-- protein glycosyltransferase subunit DAD1	4503253	12	2	19	6
796	V-type proton ATPase subunit d 1	19913432	40	2	6.80	6
797	V-type proton ATPase subunit E 1 isoform a	4502317	26	2	12	6
798	ADP-ribosylation factor-like protein 8B	8922601	22	2	18	6
799	uncharacterized protein C22orf43	56118955	25	2	9.60	6
800	titin isoform N2-A	291045225	3713	5	0.08	6
801	glycerol-3-phosphate dehydrogenase 1- like protein	24307999	38	4	6.30	6
802	lysosome-associated membrane glycoprotein 2 isoform C precursor	169790833	45	2	4.90	6
803	sperm-associated antigen 11B isoform D preproprotein	126131097	15	2	17	6
804	thioredoxin-dependent peroxide reductase, mitochondrial isoform b	32483377	26	2	9.70	6
805	renin receptor precursor	15011918	39	5	18	6
806	guanine nucleotide-binding protein subunit beta-2-like 1	5174447	35	2	8.50	6
807	izumo sperm-egg fusion protein 1 precursor	194097475	39	2	7.70	6
808	SPRY domain-containing protein 7 isoform 1	20531765	22	3	15	6
809	4F2 cell-surface antigen heavy chain isoform c	65506891	68	3	7.10	6
810	dynein intermediate chain 1, axonemal	6912338	79	3	4.00	6

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## Supplementary Table 3: Contd...

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
811	60S ribosomal protein L22 proprotein	4506613	15	2	19	6
812	ectonucleotide pyrophosphatase/phosphodiesterase family member 3	111160296	100	4	7.40	6
813	UMP-CMP kinase isoform a	7706497	26	2	14	6
814	growth arrest-specific protein 8	4503917	56	4	14	6
815	protein AHNAK2	156766050	617	2	0.36	6
816	serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform isoform 2	194688147	58	3	6.10	6
817	four and a half LIM domains protein 1 isoform 1	228480211	36	2	7.10	6
818	poly (rC)-binding protein 2 isoform b	14141166	38	2	9.70	6
819	40S ribosomal protein S20 isoform 1	226246671	16	3	19	6
820	charged multivesicular body protein 4b	28827795	25	2	9.40	6
821	B-cell receptor-associated protein 31 isoform a	213511508	35	2	6.40	6
822	protein sel-1 homolog 1 isoform 1 precursor	19923669	89	3	7.70	6
823	endoplasmic reticulum-Golgi intermediate compartment protein 2	50959176	43	2	6.90	6
824	vacuolar protein sorting-associated protein 13A isoform A	66346674	360	2	1.30	6
825	hsp90 co-chaperone Cdc37	5901922	44	3	12	6
826	ubiquitin carboxyl-terminal hydrolase isozyme L1	21361091	25	3	18	6
827	uncharacterized protein C20orf85	30425380	16	2	21	6
828	normal mucosa of esophagus-specific gene 1 protein	37694067	10	3	51	5
829	L-amino-acid oxidase isoform 2 precursor	27477089	65	3	5.80	5
830	uncharacterized protein C15orf26	148747373	34	2	9.30	5
831	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	4826848	13	2	17	5
832	chitinase domain-containing protein 1 isoform a	218083142	45	3	12	5
833	coiled-coil domain-containing protein 40 isoform 1	148664197	130	3	3.40	5
834	platelet-activating factor acetylhydrolase precursor	270133071	50	2	9.80	5
835	clathrin light chain A isoform a	4502899	24	2	14	5
836	40S ribosomal protein S19	4506695	16	3	21	5
837	proteasome subunit beta type-2 isoform 1	4506195	23	2	16	5
838	transmembrane protein 126A isoform 1	14150017	22	2	15	5
839	carnitine O-acetyltransferase precursor	21618331	71	3	6.20	5
840	COP9 signalosome complex subunit 8 isoform 1	5729779	23	3	23	5
841	WD repeat-containing protein 65 isoform a	345199335	149	3	3.00	5
842	alcohol dehydrogenase class-3	71565154	40	2	4.50	5
843	60S ribosomal protein L18	4506607	22	3	20	5
844	glutathione S-transferase omega-2 isoform 1	38016131	28	2	9.50	5
845	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial precursor	4826854	22	2	15	5
846	synaptogyrin-2	4759202	25	2	8.00	5
847	ethanolamine-phosphate cytidyltransferase isoform 1	296841136	46	2	6.90	5
848	mannosyl-oligosaccharide glucosidase isoform 1	149999606	92	2	3.60	5
849	cysteine desulfurase, mitochondrial isoform a	32307132	50	3	7.90	5
850	UPF0587 protein C1orf123	8923541	18	2	25	5
851	6-phosphogluconolactonase	6912586	28	2	16	5
852	CD63 antigen isoform A	4502679	26	2	5.00	5
853	phospholipase A1 member A isoform 2 precursor	332688256	48	2	8.20	5
854	coiled-coil-helix-coiled-coil-helix domain-containing protein 6	14150134	26	2	15	5
855	mitochondrial 2-oxoglutarate/malate carrier protein isoform 1	21361114	34	2	9.60	5
856	ras-related protein Rap-1b isoform 1 precursor	7661678	21	2	13	5
857	coiled-coil domain-containing protein 164	217416374	87	2	3.40	5
858	retinol dehydrogenase 11 isoform 1 precursor	166795268	35	2	8.50	5
859	protein BRICK1	27544939	9	3	44	5
860	neuropilin-1 isoform a precursor	182508169	103	2	4.60	5
861	disintegrin and metalloproteinase domain-containing protein 29 preproprotein	73765552	93	2	2.90	5
862	kinesin-1 heavy chain	4758648	110	3	4.20	5
863	lysozyme C precursor	4557894	17	2	13	5
864	D-dopachrome decarboxylase	4503291	13	3	26	5
865	growth arrest-specific protein 6 isoform 1 precursor	4557617	75	3	6.80	5

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Supplementary Table 3: Contd...

No.	Protein	Gel 2				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
866	arginyl-tRNA synthetase, cytoplasmic	15149476	75	3	5.80	5
867	disintegrin and metalloproteinase domain-containing protein 30 preproprotein	31881770	89	3	4.20	5
868	isoleucyl-tRNA synthetase, mitochondrial precursor	46852147	114	3	4.00	5
869	vesicle-associated membrane protein 8	14043026	11	2	19	5
870	late cornified envelope-like proline-rich protein 1	58082087	11	2	42	5
871	cytochrome c oxidase subunit 7C, mitochondrial precursor	4502993	7	2	29	5
872	protein phosphatase 1 regulatory subunit 32 isoform 1	283046778	47	2	5.20	5
873	sorcin isoform b	38679884	20	2	12	5
874	elongation factor Tu, mitochondrial precursor	34147630	50	2	7.30	5
875	glutaredoxin-related protein 5, mitochondrial precursor	42516576	17	2	20	5
876	eukaryotic translation initiation factor 3 subunit K	10801345	25	2	13	5
877	ras-related protein Rab-5A	19923262	24	2	17	5
878	zymogen granule protein 16 homolog B precursor	94536866	23	2	12	4
879	NAD-dependent malic enzyme, mitochondrial isoform 1 precursor [Homo	4505145	65	2	4.30	4
880	apoptosis-inducing factor 1, mitochondrial isoform 2 precursor	22202629	66	3	5.30	4
881	heat shock 70 protein 4	38327039	94	3	4.40	4
882	dynein light chain Tctex-type 1	5730085	12	3	39	4
883	metalloproteinase inhibitor 3 precursor	4507513	24	2	11	4
884	40S ribosomal protein S17	4506693	16	3	43	4
885	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2 isoform 1	4505355	11	2	31	4
886	40S ribosomal protein S15a	71772415	15	2	13	4
887	protein TSC21	22749357	21	2	18	4
888	dnaJ homolog subfamily C member 3 precursor	5453980	58	2	8.10	4
889	nuclear pore complex protein Nup205	57634534	228	3	2.80	4
890	3-oxoacyl-[acyl-carrier-protein] synthase, mitochondrial isoform 1	8923559	49	2	9.80	4
891	nucleosome assembly protein 1-like 1	4758756	45	2	6.10	4
892	actin-like protein 9	194097462	46	2	7.50	4
893	deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial isoform 1 precursor	70906441	27	2	12	4
894	succinyl-CoA ligase [ADP/GDP-forming] subunit alpha, mitochondrial	109452591	36	2	8.70	4
895	outer dense fiber protein 3B	116292180	27	2	7.90	4
896	proactivator polypeptide isoform a preproprotein	11386147	58	3	12	4
897	BAG family molecular chaperone regulator 2	4757834	24	2	8.50	4
898	aminoacyl tRNA synthase complex- interacting multifunctional protein 1 isoform b precursor	215490011	37	2	8.60	4
899	platelet-activating factor acetylhydrolase IB subunit beta isoform a	4505585	26	2	12	4
900	antileukoproteinase precursor	4507065	14	2	15	4
901	transmembrane emp24 domain- containing protein 1 precursor	5803040	25	2	9.70	4
902	alpha-galactosidase A precursor	4504009	49	2	7.00	4
903	iron-sulfur cluster assembly enzyme ISCU, mitochondrial isoform ISCU2 precursor	56699456	18	3	19	4
904	S-adenosylmethionine synthase isoform type-2	5174529	44	2	6.60	4
905	zona pellucida-binding protein 2 isoform 1 precursor	84875535	36	3	13	4
906	15 selenoprotein isoform 1 precursor	42741648	18	2	18	4
907	metaxin-2	5729937	30	2	12	4
908	protein EAN57 isoform 1	255759947	31	2	6.80	4
909	NADH dehydrogenase [ubiquinone] iron-sulfur protein 5	4758790	13	2	14	4
910	low molecular weight phosphotyrosine protein phosphatase isoform c	4757714	18	2	13	4
911	COP9 signalosome complex subunit 7b	12232385	30	2	10	4
912	PITH domain-containing protein 1	21361837	24	2	13	4
913	obscurin isoform a	58331253	722	2	0.74	4
914	myosin-VI	92859701	149	2	1.90	4
915	carboxypeptidase M precursor	6631081	51	2	3.80	4
916	filaggrin	60097902	435	2	0.71	4
917	cell division control protein 42 homolog isoform 1	4757952	21	2	20	4
918	inorganic pyrophosphatase 2, mitochondrial isoform 1 precursor	29171702	38	2	6.30	4
919	F-actin-capping protein subunit alpha-3	15277417	35	2	6.70	4
920	serine protease HTRA1 precursor	4506141	51	3	8.70	4

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
921	phosphoglycolate phosphatase	108796653	34	2	7.20	4
922	probable ergosterol biosynthetic protein 28	6005719	16	2	17	4
923	60S ribosomal protein L38	4506645	8	2	36	4
924	probable threonine protease PRSS50 precursor	7019563	43	2	7.50	4
925	40S ribosomal protein S27	4506711	9	2	25	4
926	60S ribosomal protein L4	16579885	48	2	8.40	4
927	60S ribosomal protein L3 isoform a	4506649	46	3	11	4
928	SUN domain-containing protein 3	71834868	41	2	6.20	4
929	ankyrin repeat domain-containing protein 45	38348298	30	3	14	4
930	glutathione peroxidase 1 isoform 1	41406084	22	2	16	4
931	heterogeneous nuclear ribonucleoprotein U isoform a	74136883	91	2	4.50	4
932	heterogeneous nuclear ribonucleoprotein H	5031753	49	2	7.60	4
933	nascent polypeptide-associated complex subunit alpha isoform a	333033787	95	2	3.10	4
934	uncharacterized protein C6orf163	256600247	39	2	9.10	4
935	phosphatidylethanolamine-binding protein 4 precursor	116812622	26	2	22	4
936	ubiquitin domain-containing protein 1	13376439	26	2	7.90	4
937	aladin isoform 1	12962937	60	2	4.80	4
938	glycerophosphodiester phosphodiesterase domain-containing protein 1	260763876	36	2	10	4
939	long-chain-fatty-acid--CoA ligase ACSBG2	83745141	74	2	3.50	4
940	uncharacterized protein C1orf194	171916088	18	2	17	3
941	heat shock 70 protein 13 precursor	48928056	52	3	7.40	3
942	ribose-phosphate pyrophosphokinase 2 isoform 2	4506129	35	2	7.50	3
943	carbonic anhydrase 2	4557395	29	3	15	3
944	beta-defensin 126 preproprotein	13624333	12	2	8.10	3
945	kita-kyushu lung cancer antigen 1	63025190	13	2	19	3
946	left-right determination factor 1 preproprotein	10337603	41	2	5.50	3
947	transcriptional activator protein Pur- alpha	5032007	35	2	11	3
948	tripeptidyl-peptidase 1 preproprotein	5729770	61	2	5.70	3
949	chloride intracellular channel protein 4	7330335	29	2	8.70	3
950	14 phosphohistidine phosphatase isoform 3	24475861	14	2	29	3
951	fatty-acid amide hydrolase 1	166795287	63	2	9.20	3
952	protein NDRG3 isoform a	14165266	41	2	10	3
953	transducin beta-like protein 2 precursor	7549793	50	2	8.30	3
954	procollagen-lysine, 2-oxoglutarate 5- dioxygenase 1 precursor	32307144	84	2	3.90	3
955	bifunctional purine biosynthesis protein PURH	20127454	65	2	3.70	3
956	uncharacterized protein C2orf77	146260271	66	2	4.50	3
957	uncharacterized protein C2orf74 isoform 1	221139892	22	2	18	3
958	lon protease homolog, mitochondrial	21396489	106	2	2.90	3
959	leucyl-tRNA synthetase, cytoplasmic	108773810	134	2	1.90	3
960	monocarboxylate transporter 1	262073007	54	2	6.60	3
961	transaldolase	5803187	38	2	6.50	3
962	macrophage-capping protein	63252913	38	2	12	3
963	40S ribosomal protein S4, X isoform X isoform	4506725	30	3	11	3
964	arachidonate 15-lipoxygenase B isoform d	85067501	76	2	3.70	3
965	uncharacterized protein C17orf46	149408117	42	2	11	3
966	cartilage acidic protein 1 isoform B precursor	330688397	70	2	4.80	3
967	actin-related protein 3	5031573	47	3	11	3
968	early endosome antigen 1	55770888	162	2	1.90	3
969	60S ribosomal protein L28 isoform 2	13904866	16	2	16	3
970	proliferation-associated protein 2G4	124494254	44	2	5.10	3
971	polyadenylate-binding protein 1	46367787	71	2	3.50	3
972	cat eye syndrome critical region protein 5 isoform 2 precursor	14861834	46	2	9.70	3
973	redox-regulatory protein PAMM isoform 1 precursor	344925828	26	2	12	3
974	beta-galactosidase isoform a preproprotein	119372308	76	2	4.10	3
975	ERO1-like protein beta precursor	239582761	54	2	6.20	3

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**Supplementary Table 3: Contd...**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
976	cleft lip and palate transmembrane protein 1	4502897	76	2	2.50	3
977	elongation factor Ts, mitochondrial isoform 2 precursor [Homo	171846268	35	2	14	3
978	calmodulin-like protein 3	4885111	17	2	19	3
979	adenine phosphoribosyltransferase isoform a	4502171	20	2	14	2
980	RPS10-NUDT3 protein	321117084	33	2	6.20	2
981	profilin-3	71274140	15	2	15	2
982	cytochrome b5 type B	83921614	17	2	21	2
983	60S ribosomal protein L14	78000181	23	2	11	2
984	spectrin alpha chain, brain isoform 2	154759259	285	2	1.20	2
985	prostate and testis expressed protein 4	221554530	11	2	23	2
986	uncharacterized protein C7orf72	332634960	50	2	11	2
987	maleylacetoacetate isomerase isoform 1	22202624	24	2	10	2
988	protein lin-7 homolog A	4759306	26	2	12	2
989	cysteine-rich secretory protein 2 precursor	215490018	27	2	9.10	2
990	beta-mannosidase precursor	84798622	101	2	3.20	2
991	epoxide hydrolase 2	27597073	63	2	3.20	2
992	alpha-1-antichymotrypsin precursor	50659080	48	2	6.90	2
993	WAP four-disulfide core domain protein 8 precursor	153946389	28	2	9.10	2
994	UDP-glucose: glycoprotein glucosyltransferase 1 precursor	9910280	177	2	1.60	2
995	DDB1- and CUL4-associated factor 7	108936958	39	2	8.20	2
996	complement C3 precursor	115298678	187	2	1.30	2
997	platelet-activating factor acetylhydrolase IB subunit alpha	4557741	47	2	7.80	2
998	neurexin-1-beta isoform beta precursor	21070967	47	2	13	2
999	pterin-4-alpha-carbinolamine dehydratase precursor	4557831	12	2	23	2
1000	up-regulated during skeletal muscle growth protein 5	14249376	6	2	43	2
1001	rho GTPase-activating protein 23	313661470	162	2	1.00	2
1002	nuclear pore complex protein Nup98- Nup96 isoform 1	21264365	196	2	1.20	2
1003	Na(+)/H(+) exchange regulatory cofactor NHE-RF1	4759140	39	2	6.70	2
1004	calsyntenin-1 isoform 2 precursor	57242755	109	2	3.00	2
1005	sepiapterin reductase	4507185	28	2	13	2
1006	choline transporter-like protein 5 isoform B	194239633	82	2	4.60	2
1007	SPARC-related modular calcium-binding protein 1 isoform 2 precursor	11545873	48	2	5.50	2
1008	suppressor of G2 allele of SKP1 homolog isoform SGT1B [Homo	195963398	41	2	7.90	2
1009	coiled-coil domain-containing protein 113 isoform 2	214830928	38	2	7.10	2
1010	coiled-coil domain-containing protein 114 isoform 2	215599324	75	2	3.60	2