

**Supplementary Table 4: Global proteomic profiling of fertile control group in triplicate - Third run**

No.	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
1	semenogelin-2 precursor	4506885	65	51	73	2028
2	semenogelin-1 preproprotein	4506883	52	63	76	1488
3	A-kinase anchor protein 4 isoform 2	21493039	93	74	74	1149
4	lactotransferrin isoform 1 precursor	54607120	78	77	80	1128
5	tubulin beta-4B chain	5174735	50	37	74	922
6	heat shock-related 70 protein 2	13676857	70	51	69	805
7	actin, cytoplasmic 1	4501885	42	37	91	788
8	fibronectin isoform 3 preproprotein	16933542	259	107	54	750
9	tubulin alpha-3C/D chain	17921993	50	38	76	696
10	clusterin preproprotein	355594753	52	32	53	614
11	78 glucose-regulated protein precursor	16507237	72	37	57	572
12	heat shock protein HSP 90-alpha isoform 1	153792590	98	48	47	525
13	A-kinase anchor protein 3	21493041	95	49	50	514
14	heat shock cognate 71 protein isoform 1	5729877	71	17	47	452
15	ATP synthase subunit beta, mitochondrial precursor	32189394	57	32	76	431

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Supplementary Table 4: Contd...

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
16	endoplasmic precursor	4507677	92	53	55	420
17	keratin, type II cytoskeletal 1	119395750	66	35	52	409
18	tubulin alpha-1A chain	17986283	50	3	60	396
19	prostatic acid phosphatase isoform TM-PAP precursor	197116348	48	21	44	394
20	heat shock 70 protein 1A/1B	194248072	70	20	52	392
21	pyruvate kinase isozymes M1/M2 isoform c	332164775	66	42	65	390
22	heat shock protein HSP 90-beta	20149594	83	20	40	378
23	heat shock 70 protein 1-like	124256496	70	27	53	371
24	protein disulfide-isomerase A3 precursor	21361657	57	39	68	366
25	alpha-enolase isoform 1	4503571	47	35	78	360
26	prolactin-inducible protein precursor	4505821	17	19	77	354
27	keratin, type I cytoskeletal 9	55956899	62	33	54	297
28	keratin, type I cytoskeletal 10	195972866	59	29	41	294
29	prostate-specific antigen isoform 1 preproprotein	4502173	29	15	69	285
30	fructose-bisphosphate aldolase A isoform 2	342187211	45	35	88	279
31	glyceraldehyde-3-phosphate dehydrogenase, testis- specific	7657116	45	20	77	271
32	triosephosphate isomerase isoform 2	226529917	31	28	94	247
33	pyruvate kinase isozymes M1/M2 isoform a	33286418	58	2	69	245
34	tubulin beta chain	29788785	50	2	62	243
35	keratin, type II cytoskeletal 2 epidermal	47132620	65	28	47	242
36	outer dense fiber protein 2 isoform 3	310750406	81	28	37	242
37	calcium-binding tyrosine phosphorylation-regulated protein isoform c	24797112	41	21	61	239
38	calcium-binding tyrosine phosphorylation-regulated protein isoform a	24797108	53	7	46	235
39	hypoxia up-regulated protein 1 precursor	5453832	111	38	36	230
40	keratin, type I cytoskeletal 13 isoform a	131412225	50	25	56	225
41	elongation factor 1-alpha 1	4503471	50	21	53	219
42	tubulin alpha-1C chain	14389309	50	2	57	214
43	ropporin-1A	21359920	24	17	81	206
44	leucine-rich repeat-containing protein 37B precursor	53829385	106	26	30	206
45	acetyl-CoA acetyltransferase, mitochondrial precursor	4557237	45	26	61	201
46	ruvB-like 2	5730023	51	30	70	199
47	malate dehydrogenase, mitochondrial precursor	21735621	36	19	68	199
48	60 heat shock protein, mitochondrial	31542947	61	37	79	192
49	ATP synthase subunit alpha, mitochondrial precursor	4757810	60	28	52	188
50	keratin, type II cytoskeletal 6A	5031839	60	14	41	181
51	aminopeptidase N precursor	157266300	110	42	43	181
52	plastin-2	167614506	70	32	63	179
53	fumarate hydratase, mitochondrial	19743875	55	25	63	172
54	ruvB-like 1	4506753	50	27	79	167
55	glutathione S-transferase Mu 3	23065552	27	19	75	166
56	T-complex protein 1 subunit beta isoform 1	5453603	57	28	62	163
57	uncharacterized protein C1orf56 precursor	20149646	37	16	49	162
58	annexin A1	4502101	39	22	65	161
59	heat shock protein beta-1	4504517	23	18	87	161
60	cathelicidin antimicrobial peptide preproprotein	348041314	20	13	51	160
61	annexin A5	4502107	36	25	76	159
62	myosin-9	12667788	227	52	29	158
63	angiotensin-converting enzyme isoform 1 precursor	4503273	150	27	23	158
64	annexin A2 isoform 1	50845388	40	23	50	152
65	acrosin-binding protein precursor	17999524	61	24	46	150
66	fatty acid synthase	41872631	273	40	12	148
67	nuclear pore membrane glycoprotein 210-like isoform 1 precursor	117414168	211	50	32	145
68	phosphoglycerate kinase 2	31543397	45	23	70	144
69	leucine-rich repeat-containing protein 37A precursor	289547512	188	19	12	144
70	zona pellucida-binding protein 1 isoform 1 precursor	229577313	40	18	52	139

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
71	tubulin beta-4A chain	21361322	50	2	61	139
72	dipeptidyl peptidase 4	18765694	88	32	43	135
73	transitional endoplasmic reticulum ATPase	6005942	89	32	43	134
74	ropporin-1B	59891409	24	5	80	134
75	keratin, type II cytoskeletal 4	331999954	56	25	54	131
76	ras-related protein Rab-2A isoform a	4506365	24	15	70	130
77	cytochrome b-c1 complex subunit 2, mitochondrial precursor	50592988	48	19	50	129
78	hexokinase-1 isoform HKI-ta/tb	15991831	103	33	36	128
79	aconitate hydratase, mitochondrial precursor	4501867	85	25	35	128
80	glyceraldehyde-3-phosphate dehydrogenase	7669492	36	18	59	127
81	creatine kinase B-type	21536286	43	16	49	126
82	phospholipid hydroperoxide glutathione peroxidase, mitochondrial isoform A precursor	75709200	22	16	63	123
83	serum albumin preproprotein	4502027	69	27	47	122
84	sperm acrosome membrane-associated protein 1 precursor	13569934	32	9	39	120
85	izumo sperm-egg fusion protein 4 isoform 1 precursor	89903025	24	9	50	120
86	keratin, type II cytoskeletal 5	119395754	62	10	18	119
87	sorbitol dehydrogenase	156627571	38	15	41	119
88	trifunctional enzyme subunit alpha, mitochondrial precursor	20127408	83	24	38	115
89	saccharopine dehydrogenase-like oxidoreductase	55770836	47	16	51	114
90	T-complex protein 1 subunit theta	48762932	60	26	42	111
91	tektin-3	13994250	57	20	52	110
92	tubulin beta-6 chain	14210536	50	4	20	109
93	14-3-3 protein epsilon	5803225	29	20	73	109
94	peroxiredoxin-1	320461711	22	13	58	109
95	calreticulin precursor	4757900	48	19	61	108
96	pyruvate dehydrogenase E1 component subunit beta, mitochondrial isoform 1 precursor	156564403	39	15	45	108
97	sperm protein associated with the nucleus on the X chromosome C	13435137	11	8	89	108
98	sperm protein associated with the nucleus on the X chromosome B/F	22027492	12	6	79	107
99	cysteine-rich secretory protein 1 isoform 1 precursor	327315372	28	11	55	106
100	trifunctional enzyme subunit beta, mitochondrial precursor	4504327	51	23	57	104
101	beta-actin-like protein 2	63055057	42	2	35	104
102	T-complex protein 1 subunit delta	38455427	58	19	41	102
103	cytochrome c oxidase subunit 4 isoform 1, mitochondrial precursor	4502981	20	15	55	101
104	14-3-3 protein zeta/delta	4507953	28	11	62	100
105	protein disulfide-isomerase precursor	20070125	57	24	51	100
106	elongation factor 1-gamma	4503481	50	16	52	99
107	L-lactate dehydrogenase C chain	4504973	36	17	49	97
108	dynein light chain 2, cytoplasmic	18087855	10	6	70	95
109	T-complex protein 1 subunit gamma isoform a	63162572	61	21	49	92
110	cAMP-dependent protein kinase type I-alpha regulatory subunit	4506063	43	13	40	92
111	succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	156416003	73	23	44	91
112	lipoprotein lipase precursor	4557727	53	15	36	91
113	dynein light chain 1, cytoplasmic	4505813	10	8	65	90
114	ubiquitin-40S ribosomal protein S27a precursor	208022622	18	4	30	90
115	long-chain-fatty-acid--CoA ligase 1	40807491	78	22	27	89
116	T-complex protein 1 subunit epsilon	24307939	60	22	56	88
117	citrate synthase, mitochondrial precursor	38327625	52	18	58	85
118	peroxiredoxin-6	4758638	25	17	69	83
119	clathrin heavy chain 1	4758012	192	28	17	82
120	T-complex protein 1 subunit eta isoform a	5453607	59	19	50	82
121	dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1 precursor	4506675	69	23	51	81
122	serum amyloid P-component precursor	4502133	25	9	34	81
123	cAMP-dependent protein kinase type II-alpha regulatory subunit	4758958	46	18	42	80
124	tektin-2	16507950	50	19	54	79
125	erlin-2 isoform 1	6005721	38	14	52	79

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
126	valyl-tRNA synthetase	5454158	140	24	22	78
127	protein FAM166A	48717426	36	14	63	77
128	2,4-dienoyl-CoA reductase, mitochondrial precursor	4503301	36	12	50	77
129	isocitrate dehydrogenase [NADP] cytoplasmic	28178825	47	15	42	77
130	peroxiredoxin-5, mitochondrial isoform a precursor	6912238	22	13	56	77
131	neutral alpha-glucosidase AB isoform 2 precursor	38202257	107	19	18	76
132	cytosol aminopeptidase	41393561	56	22	55	76
133	dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial precursor	31711992	69	13	28	76
134	cytosolic non-specific dipeptidase isoform 1	271398239	53	18	41	76
135	radial spoke head protein 9 homolog isoform 1	32964825	31	22	89	76
136	T-complex protein 1 subunit alpha isoform a	57863257	60	21	59	75
137	elongation factor 2	4503483	95	25	20	73
138	laminin subunit beta-2 precursor	119703755	196	24	17	73
139	protein disulfide-isomerase A4 precursor	4758304	73	17	30	73
140	sperm protein associated with the nucleus on the X chromosome E	22027496	11	2	89	73
141	tubulin beta-3 chain isoform 1	50592996	50	2	28	72
142	sperm equatorial segment protein 1 precursor	21717832	39	11	29	72
143	NADH-ubiquinone oxidoreductase 75 subunit, mitochondrial isoform 1	33519475	79	13	21	72
144	radial spoke head protein 6 homolog A	13540559	81	13	27	68
145	adipocyte plasma membrane-associated protein	24308201	46	18	51	68
146	L-asparaginase	145275200	32	13	56	68
147	gastricsin isoform 1 preproprotein	4505757	42	4	9.30	67
148	tektin-4	21389613	51	17	46	67
149	mitochondrial inner membrane protein isoform 3	154354966	83	21	33	66
150	calnexin precursor	10716563	68	17	28	66
151	vesicular integral-membrane protein VIP36 precursor	5803023	40	11	47	65
152	14-3-3 protein sigma	5454052	28	11	58	65
153	peroxiredoxin-2 isoform a	32189392	22	11	55	65
154	adenylate kinase isoenzyme 1	4502011	22	11	55	65
155	6-phosphofructokinase type C isoform 1	11321601	86	22	31	64
156	peptidyl-prolyl cis-trans isomerase A	10863927	18	12	67	64
157	cytochrome c oxidase subunit II	251831110	26	8	48	64
158	laminin subunit alpha-5 precursor	21264602	400	27	9.70	64
159	radial spoke head 1 homolog	18254456	35	12	52	64
160	annexin A3	4826643	36	16	27	64
161	dihydrolipoyl dehydrogenase, mitochondrial precursor	91199540	54	15	41	63
162	agrin precursor	54873613	215	25	19	63
163	ezrin	21614499	69	15	21	62
164	plasma serine protease inhibitor precursor	194018472	46	15	48	61
165	carnitine O-palmitoyltransferase 2, mitochondrial precursor	4503023	74	18	39	60
166	14-3-3 protein theta	5803227	28	7	47	60
167	sperm surface protein Sp17	8394343	17	11	74	59
168	alpha-centractin	5031569	43	13	60	59
169	D-3-phosphoglycerate dehydrogenase	23308577	57	9	18	59
170	keratin, type I cytoskeletal 14	15431310	52	7	28	58
171	histone H2B type 1-A	24586679	14	6	41	58
172	protein disulfide-isomerase A6 precursor	5031973	48	13	32	58
173	acrosomal protein SP-10 isoform a precursor	4501879	28	7	24	56
174	dipeptidase 3 isoform a precursor	193211608	56	10	21	56
175	elongation factor 1-delta isoform 1	304555581	71	8	15	55
176	voltage-dependent anion-selective channel protein 2 isoform 2	296317339	32	12	52	54
177	erlin-1	154800487	39	7	35	54
178	myosin light polypeptide 6 isoform 2	88999583	17	8	53	54
179	cytochrome c oxidase subunit 5B, mitochondrial precursor	17017988	14	12	43	54
180	T-complex protein 1 subunit zeta-2 isoform 1	58331173	58	8	30	52

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**Supplementary Table 4: Contd...**

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
181	heat shock 70 protein 4L	31541941	95	17	26	52
182	epididymal sperm-binding protein 1 precursor	301601648	26	8	44	52
183	ras-related protein Rab-11B	190358517	24	11	52	52
184	histone H4	4504303	11	9	59	51
185	voltage-dependent anion-selective channel protein 3 isoform 1	25188179	31	13	48	51
186	stress-70 protein, mitochondrial precursor	24234688	74	13	26	50
187	alpha-actinin-4	12025678	105	16	23	50
188	protein phosphatase 1 regulatory subunit 7	4506013	42	13	47	50
189	electron transfer flavoprotein subunit alpha, mitochondrial isoform a	4503607	35	15	66	50
190	hydroxyacyl-coenzyme A dehydrogenase, mitochondrial isoform 1 precursor	296179427	36	10	54	50
191	cytochrome c oxidase subunit 5A, mitochondrial precursor	190885499	17	7	38	48
192	succinyl-CoA: 3-ketoacid-coenzyme A transferase 1, mitochondrial precursor	4557817	56	14	41	48
193	peroxiredoxin-4 precursor	5453549	31	12	49	48
194	acrosin precursor	148613878	46	14	39	48
195	glutathione S-transferase P	4504183	23	10	60	48
196	enoyl-CoA hydratase, mitochondrial	194097323	31	13	53	48
197	beta-2-microglobulin precursor	4757826	14	5	38	47
198	ATP synthase subunit b, mitochondrial precursor	21361565	29	12	52	47
199	hyaluronidase PH-20 isoform 2	291290981	58	8	23	46
200	cytochrome b-c1 complex subunit 1, mitochondrial precursor	46593007	53	17	46	46
201	ATP synthase subunit d, mitochondrial isoform a	5453559	18	12	80	46
202	olfactomedin-4 precursor	32313593	57	10	28	46
203	uncharacterized protein KIAA1683 isoform a	224451032	147	15	14	46
204	keratin, type II cytoskeletal 6B	119703753	60	2	22	46
205	ferritin, mitochondrial precursor	29126241	28	9	47	46
206	uncharacterized protein C9orf9	33285006	19	10	79	46
207	26S protease regulatory subunit 4	24430151	49	10	20	45
208	3-hydroxyisobutyrate dehydrogenase, mitochondrial precursor	23308751	35	8	30	45
209	peptidyl-prolyl cis-trans isomerase B precursor	4758950	24	10	55	44
210	nucleobindin-2 precursor	4826870	50	13	38	44
211	protein FAM71B	222418633	65	10	11	44
212	uncharacterized protein C20orf106 precursor	71043622	20	8	60	44
213	synaptophysin-like protein 1 isoform a	5803185	29	5	30	44
214	plastin-3 isoform 1	209862851	71	11	27	43
215	importin subunit beta-1	19923142	97	13	12	43
216	60S acidic ribosomal protein P0	16933546	34	9	46	43
217	nucleoside diphosphate kinase homolog 5	4505413	24	8	52	43
218	annexin A6 isoform 1	71773329	76	15	25	42
219	protein-glutamine gamma-glutamyltransferase 4	156627577	77	15	20	42
220	myeloid leukemia factor 1 isoform 1	11967975	31	11	40	42
221	T-complex protein 1 subunit zeta isoform a	4502643	58	12	26	41
222	phosphoglycerate kinase 1	4505763	45	7	31	41
223	dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2 isoform 2 precursor	209413738	68	15	43	41
224	vesicle-associated membrane protein-associated protein A isoform 2	94721252	28	9	49	41
225	fructose-bisphosphate aldolase C	4885063	39	2	21	41
226	26S protease regulatory subunit 6A	21361144	49	11	36	41
227	isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial precursor	5031777	40	9	31	41
228	axonemal dynein light intermediate polypeptide 1	37595560	32	13	52	41
229	26S protease regulatory subunit 8 isoform 1	24497435	46	9	27	41
230	hsc70-interacting protein	19923193	41	6	18	41
231	carbonic anhydrase 4 precursor	4502519	35	10	34	41
232	protein DJ-1	31543380	20	12	82	41
233	keratin, type I cytoskeletal 16	24430192	51	5	30	40
234	glutamine synthetase	19923206	42	7	22	40
235	L-lactate dehydrogenase A chain isoform 3	260099723	40	10	37	40

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
236	matrix-remodeling-associated protein 5 precursor	139948432	312	14	5.80	39
237	profilin-1	4826898	15	9	65	39
238	delta (3,5)-Delta (2,4)-dienoyl-CoA isomerase, mitochondrial precursor	70995211	36	13	57	39
239	calmodulin	58218968	17	11	81	38
240	mucin-6 precursor	151301154	257	14	6.70	38
241	mitochondrial carrier homolog 2	7657347	33	9	46	38
242	dolichyl-diphosphooligosaccharide--protein glycosyltransferase 48 subunit precursor	20070197	51	10	32	38
243	ras-related protein Rab-2B isoform 1	21361884	24	3	53	38
244	coiled-coil domain-containing protein 147	56961680	103	15	19	38
245	apolipoprotein A-I preproprotein	4557321	31	10	39	38
246	ATP synthase subunit O, mitochondrial precursor	4502303	23	12	67	37
247	nuclear pore complex protein Nup155 isoform 1	24430149	155	15	15	37
248	enkurin	21450721	29	11	47	37
249	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial precursor	4758788	30	12	43	37
250	dihydropyridyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial isoform 1 precursor	19923748	49	10	34	36
251	ADP/ATP translocase 4	13775208	35	11	37	36
252	mitochondria-eating protein	21687119	61	9	18	36
253	laminin subunit gamma-1 precursor	145309326	178	14	12	35
254	sperm acrosome membrane-associated protein 3	27777653	23	6	28	35
255	proteasome subunit alpha type-1 isoform 1	23110935	30	12	56	35
256	ras-related protein Rab-14	19923483	24	11	64	35
257	actin-related protein T2	29893808	42	10	39	34
258	neprilysin	116256329	86	15	20	34
259	outer dense fiber protein 3	19526475	28	9	43	34
260	prohibitin	4505773	30	9	42	34
261	26S protease regulatory subunit 6B isoform 1	5729991	47	12	35	34
262	isochorismatase domain-containing protein 2, mitochondrial isoform 2	13376007	24	6	60	34
263	endoplasmic reticulum resident protein 29 isoform 1 precursor	5803013	29	10	44	34
264	alpha-crystallin B chain	4503057	20	11	62	34
265	cofilin-1	5031635	19	10	56	33
266	glucose-6-phosphate isomerase isoform 2	18201905	63	11	28	33
267	transmembrane emp24 domain-containing protein 10 precursor	98986464	25	9	42	33
268	reticulocalbin-2 precursor	4506457	37	12	46	33
269	histone H3.1	4504281	15	4	20	33
270	nucleoporin p54	26051237	55	10	24	33
271	proteasome subunit alpha type-6	23110944	27	9	39	33
272	protein dpy-19 homolog 2	93277105	87	10	15	32
273	protein-L-isoaspartate (D-aspartate) O- methyltransferase isoform 2	354983493	30	11	52	32
274	ubiquitin-like modifier-activating enzyme 1	23510340	118	10	8.60	32
275	14-3-3 protein beta/alpha	21328448	28	3	35	32
276	adenylate kinase 7	148727333	83	9	18	32
277	short-chain specific acyl-CoA dehydrogenase, mitochondrial precursor	4557233	44	7	25	32
278	thioredoxin-related transmembrane protein 4 precursor	40254947	39	6	17	32
279	importin subunit alpha-2	4504897	58	9	23	31
280	nuclear pore complex protein Nup93 isoform 1	208609990	93	11	12	31
281	medium-chain specific acyl-CoA dehydrogenase, mitochondrial isoform b precursor	187960098	47	12	35	31
282	heme oxygenase 2	8051608	36	9	46	31
283	transmembrane emp24 domain-containing protein 9 precursor	39725636	27	8	24	31
284	ADP-ribosylation factor 1	4502201	21	9	52	31
285	epididymal secretory protein E3-beta precursor	11641279	18	6	50	31
286	stomatin-like protein 2	7305503	39	10	51	31
287	cytochrome b-c1 complex subunit Rieske, mitochondrial	163644321	30	8	39	31
288	uncharacterized protein C20orf107 precursor	71043642	19	10	56	30
289	synaptic vesicle membrane protein VAT-1 homolog	18379349	42	11	39	30
290	brain acid soluble protein 1	30795231	23	6	47	30

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Supplementary Table 4: Contd...

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
291	26S proteasome non-ATPase regulatory subunit 13 isoform 1	157502193	43	10	27	29
292	proteasome subunit alpha type-5 isoform 1	23110942	26	10	53	29
293	annexin A4	4502105	36	11	41	29
294	abhydrolase domain-containing protein 10, mitochondrial precursor	8923001	34	6	26	29
295	sodium/potassium-transporting ATPase subunit alpha- 4 isoform 1	153946397	114	12	13	29
296	protein NDRG1	37655183	43	5	22	29
297	carbonyl reductase [NADPH] 1	4502599	30	10	40	29
298	isocitrate dehydrogenase [NAD] subunit beta, mitochondrial isoform a precursor	28178821	42	12	35	29
299	rab GDP dissociation inhibitor beta isoform 1	6598323	51	7	24	29
300	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 10	4758774	21	6	37	29
301	DPY30 domain-containing protein 1	20270377	21	11	76	29
302	serpin B6	41152086	43	10	39	28
303	26S proteasome non-ATPase regulatory subunit 7	25777615	37	7	31	28
304	cytochrome c1, heme protein, mitochondrial	21359867	35	10	52	28
305	hydroxyacylglutathione hydrolase, mitochondrial isoform 1 precursor	94538322	34	11	37	28
306	SYNJ2BP-COX16 protein isoform 1	321400118	21	7	33	28
307	proteasome subunit beta type-5 isoform 1	4506201	28	7	32	28
308	glycerol kinase 2	41393575	61	7	17	28
309	uromodulin precursor	59850812	70	10	17	28
310	solute carrier family 2, facilitated glucose transporter member 14	23592238	56	8	14	28
311	signal peptidase complex subunit 2	162417971	25	11	39	28
312	tetratricopeptide repeat protein 25	13899233	77	11	14	28
313	ribonuclease inhibitor	42822872	50	7	15	28
314	proteasome subunit beta type-6	23110925	25	7	47	28
315	single-stranded DNA-binding protein, mitochondrial precursor	4507231	17	6	42	27
316	electron transfer flavoprotein subunit beta isoform 1	4503609	28	11	45	27
317	maltase-glucoamylase, intestinal	221316699	210	10	7.10	27
318	endophilin-B1 isoform 2	331284170	44	8	21	27
319	14-3-3 protein gamma	21464101	28	3	34	27
320	solute carrier family 2, facilitated glucose transporter member 3	5902090	54	3	14	27
321	L-xylulose reductase isoform 1	7705925	26	10	36	27
322	collagen alpha-1(XVIII) chain isoform 1 precursor	110611235	154	10	7.70	27
323	proteasome subunit beta type-7 proprotein	4506203	30	9	49	27
324	sperm-associated antigen 6 isoform 1	6912678	55	10	33	26
325	succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial precursor	115387094	32	8	33	26
326	radial spoke head protein 3 homolog	31543559	64	7	17	26
327	transmembrane protease serine 2 isoform 2	205360943	54	5	8.70	26
328	proteasome subunit alpha type-7-like isoform 2	68303563	28	9	50	26
329	beta-defensin 129 precursor	18250304	20	4	24	26
330	receptor expression-enhancing protein 6	19923919	21	7	33	26
331	ropporin-1-like protein	17572807	26	10	47	26
332	adenylyl cyclase-associated protein 1	5453595	52	9	21	26
333	alpha-soluble NSF attachment protein	47933379	33	9	42	26
334	malectin precursor	7661948	32	9	41	25
335	uncharacterized protein C7orf61	51972226	24	5	34	25
336	proteasome subunit alpha type-2	4506181	26	8	48	25
337	phosphatidylethanolamine-binding protein 1 preproprotein	4505621	21	6	53	25
338	ubiquitin carboxyl-terminal hydrolase isozyme L3	5174741	26	6	33	25
339	flavin reductase (NADPH)	4502419	22	6	35	25
340	eukaryotic translation initiation factor 5A-1 isoform B	219555712	17	9	51	25
341	ras-related protein Rab-27B	5729997	25	9	35	25
342	NADH dehydrogenase [ubiquinone] iron-sulfur protein 8, mitochondrial precursor	4505371	24	5	24	25
343	carboxypeptidase Z isoform 2 precursor	62388875	73	7	9.50	24
344	carboxypeptidase E preproprotein	4503009	53	7	19	24
345	nuclear pore membrane glycoprotein 210 precursor	27477134	205	12	9.20	24

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**Supplementary Table 4: Contd...**

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
346	26S protease regulatory subunit 10B	195539395	46	8	25	24
347	26S proteasome non-ATPase regulatory subunit 14	5031981	35	6	40	24
348	plasma membrane calcium-transporting ATPase 4 isoform 4b	48255957	134	10	10	24
349	alanyl-tRNA editing protein Aarsd1 isoform 1	217416402	66	8	21	24
350	coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial precursor	8923390	26	7	24	24
351	26S proteasome non-ATPase regulatory subunit 11	28872725	47	7	21	24
352	transmembrane protein 190 precursor	21040263	19	5	31	24
353	L-lactate dehydrogenase A-like 6B	15082234	42	6	28	24
354	proteasome subunit beta type-4	22538467	29	7	45	24
355	membrane-associated progesterone receptor component 1	5729875	22	8	40	24
356	proteasome subunit beta type-3	22538465	23	5	32	24
357	very long-chain specific acyl-CoA dehydrogenase, mitochondrial isoform 2 precursor	76496475	68	10	25	23
358	filamin-B isoform 2	105990514	278	13	5.90	23
359	lipid phosphate phosphohydrolase 1 isoform 1	29171736	32	4	21	23
360	lysosome-associated membrane glycoprotein 1 precursor	112380628	45	4	9.80	23
361	glypican-4 precursor	21614525	62	7	17	23
362	membrane-associated progesterone receptor component 2	291621647	26	4	17	23
363	endoplasmic reticulum resident protein 44 precursor	52487191	47	6	25	23
364	epididymal secretory protein E3-alpha precursor	11386189	18	5	41	23
365	proteasome subunit alpha type-7	4506189	28	3	42	23
366	pyruvate dehydrogenase E1 component subunit alpha, testis-specific form, mitochondrial precursor	4885543	43	8	18	22
367	G-protein coupled receptor 64 isoform 2 precursor	119943116	110	6	8.50	22
368	vesicle-fusing ATPase	156564401	83	8	13	22
369	ES1 protein homolog, mitochondrial isoform Ia precursor	296531406	28	7	38	22
370	tektin-1	16753231	48	7	23	22
371	glutathione reductase, mitochondrial isoform 1 precursor	50301238	56	10	39	22
372	lactadherin isoform a preproprotein	167830475	43	7	24	22
373	uncharacterized protein C9orf24 isoform 1	21362074	30	7	28	22
374	enoyl-CoA delta isomerase 1, mitochondrial isoform 2 precursor	295842266	31	5	20	22
375	translin	4759270	26	9	46	22
376	ADP-ribosylation factor 4	4502205	21	3	44	22
377	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial precursor	222080062	27	8	32	22
378	protein S100-A8	21614544	11	5	47	22
379	WD repeat-containing protein 16 isoform b	124028512	68	9	21	21
380	tripeptidyl-peptidase 2	186972143	138	9	10	21
381	keratin, type I cytoskeletal 19	24234699	44	3	19	21
382	aspartate aminotransferase, mitochondrial precursor	73486658	48	9	32	21
383	calcium-binding and spermatid-specific protein 1	90652863	43	7	32	21
384	26S proteasome non-ATPase regulatory subunit 2	25777602	100	11	15	21
385	parkin coregulated gene protein isoform 2	122939202	29	6	32	21
386	CDGSH iron-sulfur domain-containing protein 1	8923930	12	6	56	21
387	transmembrane and coiled-coil domain-containing protein 2	56847610	20	5	28	21
388	FUN14 domain-containing protein 2	24371248	21	10	42	21
389	vesicle-associated membrane protein 3	4759300	11	6	53	21
390	acrosome formation-associated factor isoform 1	239582757	33	4	21	21
391	NME1-NME2 protein	66392203	30	8	39	21
392	ribonuclease-like protein 13 precursor	59276062	18	6	35	21
393	COP9 signalosome complex subunit 4	38373690	46	8	21	21
394	zymogen granule protein 16 homolog B precursor	94536866	23	5	34	21
395	keratin, type II cytoskeletal 8	4504919	54	4	14	20
396	2-oxoglutarate dehydrogenase, mitochondrial isoform 3 precursor	259013553	116	9	9.80	20
397	alcohol dehydrogenase [NADP+]	24497577	37	6	13	20
398	eukaryotic initiation factor 4A-I isoform 1	4503529	46	6	17	20
399	alpha-actinin-1 isoform c	194097352	103	2	11	20
400	cullin-associated NEDD8-dissociated protein 1	21361794	136	8	8.80	20

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
401	adenosylhomocysteinase isoform 1	9951915	48	8	21	20
402	proteasome subunit beta type-1	4506193	26	6	28	20
403	26S protease regulatory subunit 7 isoform 1	4506209	49	8	25	20
404	protein FAM154A	301129242	55	5	16	20
405	sperm acrosome-associated protein 5 precursor	120952755	18	5	35	20
406	barrier-to-autointegration factor	4502389	10	4	45	20
407	glutamate carboxypeptidase 2 isoform 1	4758398	84	9	18	20
408	GTP-binding nuclear protein Ran	5453555	24	6	35	20
409	glypican-1 precursor	167001141	62	7	15	20
410	sodium/potassium-transporting ATPase subunit alpha- 2 proprotein	4502271	112	2	9.10	20
411	lysozyme-like protein 4 precursor	21389465	16	5	42	20
412	thioredoxin domain-containing protein 3	148839372	67	8	19	19
413	importin-5	24797086	126	8	10	19
414	glucosidase 2 subunit beta isoform 1 precursor	48255889	59	7	13	19
415	lysosomal alpha-glucosidase preproprotein	119393891	105	6	8.00	19
416	sodium/potassium-transporting ATPase subunit beta-3	4502281	32	5	33	19
417	CD59 glycoprotein preproprotein	187828910	14	3	25	19
418	calmin	19923599	112	10	15	19
419	adenylate kinase 8	22749187	55	7	19	19
420	extracellular matrix protein 1 isoform 3 precursor	322302700	64	7	11	19
421	transcription factor A, mitochondrial precursor	4507401	29	7	32	19
422	kallikrein-2 isoform 1 precursor	5031829	29	5	18	19
423	40S ribosomal protein S2	15055539	31	7	21	19
424	kelch-like protein 10	148664209	69	9	24	19
425	40S ribosomal protein S3	15718687	27	8	32	19
426	receptor expression-enhancing protein 5	115430112	21	6	25	19
427	sodium/potassium-transporting ATPase subunit alpha- 1 isoform a	21361181	113	2	10	19
428	4-trimethylaminobutyraldehyde dehydrogenase	115387104	56	7	15	18
429	NADH-cytochrome b5 reductase 2	47778923	31	9	46	18
430	kunitz-type protease inhibitor 3 precursor	189571689	10	3	29	18
431	dynactin subunit 2	5453629	45	6	22	18
432	calpain small subunit 1	51599151	28	5	44	18
433	ATP synthase subunit gamma, mitochondrial isoform L (liver) precursor	50345988	33	6	22	18
434	protein S100-A11	5032057	12	6	52	18
435	galectin-3-binding protein precursor	5031863	65	6	9.90	18
436	BPI fold-containing family A member 3 isoform 1 precursor	109627654	28	5	31	18
437	mitochondrial import receptor subunit TOM22 homolog	9910382	16	6	77	18
438	epididymal secretory protein E1 precursor	5453678	17	6	45	18
439	cathepsin F precursor	6042196	53	7	12	18
440	translationally-controlled tumor protein	4507669	20	5	55	18
441	EF-hand calcium-binding domain-containing protein 6 isoform a	38570107	173	7	4.20	18
442	transmembrane emp24 domain-containing protein 7 precursor	32996709	25	7	39	18
443	ras-related protein Rab-1B	13569962	22	5	36	18
444	casein kinase II subunit alpha isoform a	29570791	45	5	22	18
445	40S ribosomal protein SA	59859885	33	6	32	18
446	deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial isoform 1 precursor	70906441	27	6	33	18
447	adenine phosphoribosyltransferase isoform a	4502171	20	7	36	18
448	chloride intracellular channel protein 1	14251209	27	7	30	17
449	cytochrome b-c1 complex subunit 7 isoform 1	5454152	14	7	55	17
450	rho GDP-dissociation inhibitor 1 isoform a	4757768	23	3	23	17
451	transmembrane emp24 domain-containing protein 4 precursor	33457308	26	3	20	17
452	lysyl-tRNA synthetase isoform 1	194272210	71	6	11	17
453	dnaJ homolog subfamily B member 11 precursor	7706495	41	7	25	17
454	carboxypeptidase D isoform 1 precursor	22202611	153	10	11	17
455	phosphoglycerate mutase 2	50593010	29	5	27	17

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
456	ras GTPase-activating-like protein IQGAP1	4506787	189	9	6.30	17
457	40S ribosomal protein S3a	4506723	30	7	26	17
458	eukaryotic translation initiation factor 3 subunit F	4503519	38	5	16	17
459	nicastrin precursor	24638433	78	6	9.90	17
460	signal peptidase complex subunit 3	11345462	20	5	26	17
461	beta-lactamase-like protein 2	7705793	33	7	32	17
462	stress-induced-phosphoprotein 1	5803181	63	6	13	17
463	von Willebrand factor A domain-containing protein 1 isoform 1 precursor	40068485	47	7	28	17
464	prenylcysteine oxidase 1 precursor	166795301	57	6	18	17
465	ras-related protein Rab-3D	4759000	24	3	32	17
466	ATPase inhibitor, mitochondrial isoform 1 precursor	7705927	12	3	15	17
467	F-actin-capping protein subunit alpha-1	5453597	33	5	31	17
468	lactoylglutathione lyase	118402586	21	6	29	17
469	proteasome subunit beta type-2 isoform 1	4506195	23	6	38	17
470	histone H2A type 1-A	25092737	14	3	27	16
471	proteasome subunit alpha type-4 isoform 1	4506185	29	6	25	16
472	protein S100-A9	4506773	13	4	46	16
473	pyruvate dehydrogenase protein X component, mitochondrial isoform 2	203098816	51	7	24	16
474	6-phosphogluconate dehydrogenase, decarboxylating	40068518	53	7	21	16
475	complement component 1 Q subcomponent-binding protein, mitochondrial precursor	4502491	31	5	32	16
476	long-chain-fatty-acid--CoA ligase 6 isoform e	327412327	79	6	13	16
477	proteasome activator complex subunit 1 isoform 1	5453990	29	5	30	16
478	copper homeostasis protein cutC homolog	148596990	29	5	31	16
479	myosin regulatory light chain 12B	15809016	20	6	45	16
480	UPF0468 protein C16orf80	8392875	23	3	16	16
481	mesencephalic astrocyte-derived neurotrophic factor precursor	299523086	21	6	19	16
482	cAMP-dependent protein kinase catalytic subunit alpha isoform 2	46909584	40	3	14	16
483	ecto-ADP-ribosyltransferase 3 isoform a precursor	194097380	44	4	11	16
484	ATP-citrate synthase isoform 1	38569421	121	6	3.70	16
485	ras-related protein Rab-3B	19923750	25	5	36	16
486	adenylate kinase 2, mitochondrial isoform a	4502013	26	6	41	16
487	glycodelin precursor	65507501	21	3	24	16
488	ATP synthase subunit g, mitochondrial	51479156	11	5	43	16
489	transmembrane emp24 domain-containing protein 2 precursor	5803149	23	4	31	16
490	heme-binding protein 2	7657603	23	4	24	16
491	cadherin-1 preproprotein	4757960	97	3	3.20	16
492	transthyretin precursor	4507725	16	5	51	16
493	eukaryotic initiation factor 4A-II	83700235	46	2	21	16
494	myosin-10	41406064	229	2	4.10	15
495	dynein heavy chain 17, axonemal	256542310	509	9	2.90	15
496	dynein heavy chain 8, axonemal	332688227	539	10	2.50	15
497	leucine zipper transcription factor-like protein 1	9966793	35	5	23	15
498	melanoma inhibitory activity protein 3 precursor	122891870	214	7	4.80	15
499	ADP/ATP translocase 2	156071459	33	3	19	15
500	mRNA export factor	62739173	41	6	16	15
501	testis-expressed protein 101 isoform 1	194018544	29	3	15	15
502	voltage-dependent anion-selective channel protein 1	4507879	31	3	16	15
503	proteasome subunit alpha type-3 isoform 2	23110939	28	7	34	15
504	nuclear pore glycoprotein p62	24497605	53	5	14	15
505	zinc-alpha-2-glycoprotein precursor	4502337	34	7	27	15
506	hypoxanthine-guanine phosphoribosyltransferase	4504483	25	6	43	15
507	L-lactate dehydrogenase B chain	4557032	37	3	16	15
508	26S proteasome non-ATPase regulatory subunit 3	25777612	61	4	9.90	15
509	transmembrane protein 89 precursor	56847630	18	4	28	15
510	calcium-binding mitochondrial carrier protein Aralar1	21361103	75	6	13	15

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Supplementary Table 4: Contd...

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
511	izumo sperm-egg fusion protein 2 precursor	63999117	25	4	14	15
512	UPF0733 protein C2orf88	110349742	11	6	68	14
513	prostate and testis expressed protein 1 precursor	19923082	14	5	45	14
514	thioredoxin isoform 1	50592994	12	3	32	14
515	coiled-coil domain-containing protein 63	22749217	66	6	14	14
516	translin-associated protein X	5174731	33	6	26	14
517	dnaJ homolog subfamily A member 2	5031741	46	6	24	14
518	prostasin preproprotein	4506153	36	3	18	14
519	eukaryotic translation elongation factor 1 epsilon-1 isoform 1	4758862	20	5	41	14
520	fragile X mental retardation 1 neighbor protein	22749199	29	4	15	14
521	diablo homolog, mitochondrial isoform 1 precursor	9845297	27	5	26	14
522	cathepsin D preproprotein	4503143	45	5	18	14
523	superoxide dismutase [Cu-Zn]	4507149	16	5	60	14
524	dnaJ homolog subfamily B member 13	39204547	36	5	22	14
525	uncharacterized protein C15orf26	148747373	34	4	18	14
526	fatty-acid amide hydrolase 1	166795287	63	6	12	14
527	ras-related protein Rab-1A isoform 1	4758988	23	3	42	14
528	enoyl-CoA delta isomerase 2, mitochondrial isoform 2	260274832	44	7	23	14
529	EF-hand domain-containing protein 1 isoform 1	156616292	74	9	17	13
530	exportin-7	154448892	124	6	5.80	13
531	tektin-5	21389569	56	7	21	13
532	regenerating islet-derived protein 3-gamma precursor	38348213	19	4	34	13
533	UTP--glucose-1-phosphate uridylyltransferase isoform b	48255968	56	5	13	13
534	T-complex protein 11 homolog isoform 1	148226214	57	6	23	13
535	annexin A11	22165431	54	5	15	13
536	superoxide dismutase [Mn], mitochondrial isoform A precursor	67782305	25	4	32	13
537	poly (rC)-binding protein 1	222352151	37	3	9.30	13
538	glycogen phosphorylase, brain form	21361370	97	5	6.20	13
539	F-actin-capping protein subunit beta isoform 1	4826659	31	5	19	13
540	cystatin-B	4503117	11	4	55	13
541	3-ketoacyl-CoA thiolase, mitochondrial	167614485	42	5	26	13
542	UPF0740 protein C1orf192	63029930	19	3	22	13
543	45 calcium-binding protein isoform 2 precursor	18699732	42	6	23	13
544	ras-related protein Rab-5C isoform a	41393614	23	5	30	13
545	casein kinase II subunit beta	23503295	25	6	46	13
546	dynein light chain 1, axonemal isoform 1	164607156	22	6	28	13
547	HD domain-containing protein 2	116875826	23	5	36	13
548	translocon-associated protein subunit alpha precursor	169404009	32	3	12	13
549	acyl carrier protein, mitochondrial precursor	4826852	17	3	21	13
550	ferritin heavy chain	56682959	21	6	37	13
551	thioredoxin-dependent peroxide reductase, mitochondrial isoform b	32483377	26	3	16	13
552	COP9 signalosome complex subunit 8 isoform 1	5729779	23	3	29	13
553	apoptosis-inducing factor 1, mitochondrial isoform 2 precursor	22202629	66	7	16	13
554	carbonic anhydrase 2	4557395	29	5	24	13
555	LETM1 and EF-hand domain-containing protein 1, mitochondrial precursor	6912482	83	5	7.60	12
556	cytoplasmic dynein 1 heavy chain 1	33350932	532	7	1.20	12
557	bifunctional aminoacyl-tRNA synthetase	62241042	171	6	4.70	12
558	sperm acrosome membrane-associated protein 4 precursor	19424138	13	2	22	12
559	aspartyl aminopeptidase	156416028	53	4	15	12
560	gamma-glutamyltranspeptidase 1 precursor	73915090	61	4	6.30	12
561	dnaJ homolog subfamily B member 1	5453690	38	4	14	12
562	coiled-coil domain-containing protein 105	226492892	57	7	16	12
563	malate dehydrogenase, cytoplasmic isoform 1	312283701	39	4	18	12
564	erythrocyte band 7 integral membrane protein isoform a	38016911	32	4	20	12
565	60S acidic ribosomal protein P2	4506671	12	4	59	12

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No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
566	protein NipSnap homolog 3A	22267436	28	5	28	12
567	programmed cell death protein 6	7019485	22	6	45	12
568	cytochrome c oxidase subunit 6B1	4502985	10	4	34	12
569	tryptophanyl-tRNA synthetase, cytoplasmic isoform b	47419918	49	4	17	12
570	nucleoporin p58/p45 isoform a	30102928	61	5	15	12
571	stromal cell-derived factor 2-like protein 1 precursor	56243533	24	3	20	12
572	speriolin isoform 1	197276668	62	4	9.80	12
573	A disintegrin and metalloproteinase with thrombospondin motifs 1 preproprotein	50845384	105	4	6.80	12
574	general vesicular transport factor p115	4505541	108	5	5.50	12
575	prenylated Rab acceptor protein 1	222144309	21	3	18	12
576	nucleotide exchange factor SIL1 precursor	11968009	52	5	13	12
577	26S proteasome non-ATPase regulatory subunit 8	156631005	40	6	23	12
578	3-hydroxyacyl-CoA dehydrogenase type-2 isoform 1	4758504	27	4	15	12
579	acylamino-acid-releasing enzyme	23510451	81	6	11	12
580	ubiquitin thioesterase OTUB1	109148508	31	6	25	12
581	serine protease inhibitor Kazal-type 2 precursor	10863911	9	2	36	12
582	dnaJ homolog subfamily B member 8	23503241	26	4	22	11
583	EGF-like repeat and discoidin I-like domain-containing protein 3 precursor	31317224	54	5	14	11
584	eukaryotic translation initiation factor 3 subunit I	4503513	37	4	22	11
585	CD177 antigen precursor	110735433	46	4	15	11
586	kinectin isoform a	33620775	156	9	7.70	11
587	serine protease 58 precursor	48255915	27	4	18	11
588	septin-7 isoform 2	148352329	51	4	16	11
589	nucleoporin NUP53	31982904	35	4	19	11
590	ubiquitin carboxyl-terminal hydrolase 14 isoform b	82880645	52	5	16	11
591	signal peptidase complex catalytic subunit SEC11A	7657609	21	4	31	11
592	mitochondrial dicarboxylate carrier	20149598	31	4	18	11
593	serine/threonine-protein phosphatase PGAM5, mitochondrial isoform 1	281604136	32	2	7.60	11
594	aspartate aminotransferase, cytoplasmic	4504067	46	5	24	11
595	actin-related protein M1	221139714	41	5	18	11
596	syntaxin-12	28933465	32	4	27	11
597	leucine-rich repeat-containing protein 23 isoform a	42542396	40	4	21	11
598	gamma-glutamyl hydrolase precursor	4503987	36	3	12	11
599	elongation factor 1-beta	4503477	25	3	30	11
600	serine/threonine-protein phosphatase 2A 65 regulatory subunit A alpha isoform	21361399	65	5	9.80	11
601	purine nucleoside phosphorylase	157168362	32	4	16	11
602	voltage-dependent calcium channel subunit alpha-2/delta-2 isoform c	291290994	130	5	5.20	11
603	UMP-CMP kinase isoform a	7706497	26	4	24	11
604	carnitine O-acetyltransferase precursor	21618331	71	4	9.30	11
605	phospholipase A1 member A isoform 2 precursor	332688256	48	3	10	11
606	actin-like protein 9	194097462	46	5	21	11
607	chloride intracellular channel protein 4	7330335	29	4	22	11
608	GTP-binding protein SAR1b	7705827	22	2	35	11
609	alpha-mannosidase 2C1	46852164	116	4	5.40	10
610	vimentin	62414289	54	5	14	10
611	alpha-1-antitrypsin precursor	50363217	47	4	12	10
612	aldose reductase	4502049	36	4	20	10
613	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8	7657369	20	3	22	10
614	slit homolog 2 protein precursor	4759146	170	6	6.40	10
615	testis, prostate and placenta-expressed protein isoform 2 precursor	154759245	31	5	29	10
616	transcription elongation factor B polypeptide 2 isoform b	46276893	18	4	34	10
617	dynactin subunit 1 isoform 1	13259510	142	5	3.80	10
618	heterogeneous nuclear ribonucleoprotein M isoform a	14141152	78	6	9.70	10
619	methionyl-tRNA synthetase, cytoplasmic	14043022	101	5	8.40	10
620	tubulin polymerization-promoting protein family member 2	226491350	19	5	48	10

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**Supplementary Table 4: Contd...**

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
621	anterior gradient protein 2 homolog precursor	5453541	20	4	33	10
622	proteasome activator complex subunit 4	163644283	211	5	3.60	10
623	transcription elongation factor B polypeptide 1 isoform a	325652033	12	5	51	10
624	tomoregulin-2 precursor	12383051	41	4	11	10
625	serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform	4506017	36	4	21	10
626	uncharacterized protein C9orf171	46409466	36	4	14	10
627	apolipoprotein D precursor	4502163	21	4	22	10
628	EF-hand calcium-binding domain-containing protein 1 isoform a	13375787	24	4	27	10
629	tropomyosin alpha-3 chain isoform 2	24119203	29	3	17	10
630	ran-specific GTPase-activating protein	4506407	23	2	10.00	10
631	nucleophosmin isoform 1	10835063	33	2	17	10
632	protein DPCD	39930355	23	5	34	10
633	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7	10764847	16	4	27	10
634	midkine precursor	4505135	16	2	18	10
635	puromycin-sensitive aminopeptidase	158937236	103	5	2.70	10
636	ATP synthase subunit epsilon, mitochondrial	5901896	6	3	45	10
637	GLIPR1-like protein 1 precursor	22749527	26	4	16	10
638	acyl-protein thioesterase 1	5453722	25	4	32	10
639	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial isoform 1 precursor	20149568	51	4	13	9
640	calmegin precursor	4758004	70	4	9.00	9
641	EF-hand domain-containing family member C2	31542743	87	4	3.10	9
642	testis-specific H1 histone	32401437	28	2	9.40	9
643	leukocyte surface antigen CD47 isoform 1 precursor	4502673	35	2	5.90	9
644	uncharacterized protein C2orf57	284413778	42	4	15	9
645	histone H1t .	20544168	22	3	17	9
646	V-type proton ATPase catalytic subunit A	19913424	68	3	8.60	9
647	dnaJ homolog subfamily A member 4 isoform 2	194328760	45	5	17	9
648	phosphate carrier protein, mitochondrial isoform b precursor	47132595	40	3	9.70	9
649	gelsolin isoform a precursor	4504165	86	3	4.00	9
650	disintegrin and metalloproteinase domain-containing protein 7 preproprotein	114326453	86	4	7.30	9
651	26S proteasome non-ATPase regulatory subunit 4	5292161	41	5	18	9
652	pro-cathepsin H preproprotein	23110955	37	2	8.40	9
653	ras-related protein Ral-A precursor	33946329	24	3	18	9
654	dnaJ homolog subfamily B member 6 isoform b	4885495	27	2	14	9
655	probable inactive serine protease 37 isoform 1 precursor	285394164	26	3	16	9
656	metalloproteinase inhibitor 1 precursor	4507509	23	3	27	9
657	UBX domain-containing protein 11 isoform 1	116734681	54	3	11	9
658	glutathione S-transferase Mu 1 isoform 1	23065544	26	2	14	9
659	retinoid-inducible serine carboxypeptidase precursor	11055992	51	3	5.50	9
660	sulfatase-modifying factor 2 isoform e precursor	194248090	39	3	11	9
661	60S ribosomal protein L7a	4506661	30	3	15	9
662	cytochrome c oxidase subunit 7A2, mitochondrial precursor	262118227	13	3	22	9
663	eukaryotic translation initiation factor 6 isoform a	4504771	27	3	20	9
664	peptidyl-prolyl cis-trans isomerase F, mitochondrial precursor	5031987	22	3	21	9
665	ras-related protein Rab-6A isoform b	38679888	24	3	23	9
666	actin-like protein 7A	5729720	49	4	15	9
667	fumarylacetoacetate hydrolase domain-containing protein 2B	40786394	35	3	17	9
668	retinal dehydrogenase 1	21361176	55	5	17	9
669	izumo sperm-egg fusion protein 1 precursor	194097475	39	4	22	9
670	normal mucosa of esophagus-specific gene 1 protein	37694067	10	4	29	9
671	UPF0587 protein C1orf123	8923541	18	2	25	9
672	cell division control protein 42 homolog isoform 1	4757952	21	3	26	9
673	F-actin-capping protein subunit alpha-3	15277417	35	3	12	9
674	bifunctional purine biosynthesis protein PURH	20127454	65	4	13	9
675	cancer/testis antigen 47A	121949786	30	3	15	9

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Supplementary Table 4: Contd...

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
676	nitrilase homolog 1 isoform 3	297632348	34	3	9.60	9
677	ras-related C3 botulinum toxin substrate 1 isoform Rac1b	9845509	23	4	13	9
678	NADH-cytochrome b5 reductase 3 isoform 2	193794826	32	3	23	9
679	sialidase-1 precursor	4557791	45	3	12	9
680	coiled-coil domain-containing protein 19, mitochondrial precursor	81295816	66	4	10.00	8
681	26S proteasome non-ATPase regulatory subunit 1 isoform 1	25777600	106	3	5.00	8
682	cytochrome c	11128019	12	3	31	8
683	succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial precursor	11321583	50	3	7.80	8
684	large proline-rich protein BAG6 isoform a	149158692	119	4	4.50	8
685	10 heat shock protein, mitochondrial	4504523	11	4	33	8
686	ras-related protein Rab-7a	34147513	23	4	13	8
687	cullin-3	4503165	89	5	7.80	8
688	protein FAM71A	282721094	63	3	5.40	8
689	bifunctional ATP-dependent dihydroxyacetone kinase/FAD-AMP lyase (cyclizing)	20149621	59	3	8.30	8
690	60S ribosomal protein L12	4506597	18	4	40	8
691	dihydropteridine reductase	208973246	26	3	21	8
692	keratin, type I cytoskeletal 18	4557888	48	2	13	8
693	mitochondrial import receptor subunit TOM34	21361356	35	4	19	8
694	lipase member I	39752679	55	3	6.70	8
695	spermatogenesis-associated protein 19, mitochondrial precursor	28376652	19	3	26	8
696	proteasome activator complex subunit 2	30410792	27	4	18	8
697	S-phase kinase-associated protein 1 isoform b	25777713	19	4	36	8
698	nucleoside diphosphate kinase 7 isoform a	7019465	42	4	15	8
699	atlastin-3	45827806	61	3	11	8
700	uncharacterized protein C6orf81	31542280	41	4	19	8
701	aflatoxin B1 aldehyde reductase member 2	41327764	40	4	16	8
702	four and a half LIM domains protein 1 isoform 1	228480211	36	3	11	8
703	WD repeat-containing protein 65 isoform a	345199335	149	4	3.50	8
704	serine protease HTRA1 precursor	4506141	51	4	14	8
705	transcriptional activator protein Pur-alpha	5032007	35	3	18	8
706	macrophage-capping protein	63252913	38	3	16	8
707	cytochrome b5 type B	83921614	17	4	52	8
708	integral membrane protein 2B	11527402	30	3	16	8
709	dynactin subunit 3 isoform 1	6005745	21	4	19	8
710	intraflagellar transport protein 27 homolog isoform 2	6857824	20	3	24	8
711	neutrophil defensin 3 preproprotein	4885179	10	3	20	7
712	protein ERGIC-53 precursor	5031873	58	4	13	7
713	nuclear migration protein nudC	5729953	38	3	11	7
714	lysosome membrane protein 2 isoform 1 precursor	5031631	54	3	7.30	7
715	glyoxylate reductase/hydroxypyruvate reductase	6912396	36	3	16	7
716	arfaptin-1 isoform 1	71040094	42	2	5.10	7
717	interferon-inducible GTPase 5	10257429	50	3	12	7
718	serine/threonine-protein phosphatase PP1-beta catalytic subunit isoform 1	4506005	37	2	7.60	7
719	sortilin isoform 1 preproprotein	17149834	92	3	4.60	7
720	40S ribosomal protein S8	4506743	24	3	13	7
721	histidine triad nucleotide-binding protein 2, mitochondrial precursor	14211923	17	3	31	7
722	inositol monophosphatase 1 isoform 2	221625487	37	3	11	7
723	mammaglobin-B precursor	4505171	11	3	40	7
724	transmembrane protein 205	63055043	21	2	16	7
725	ras-related protein Rab-5B isoform 1	354725902	24	3	22	7
726	carnitine O-palmitoyltransferase 1, muscle isoform isoform a	223468678	88	4	6.30	7
727	thiamine-triphosphatase	13236577	26	3	18	7
728	myosin light chain 6B	313851001	23	2	18	7
729	acid ceramidase isoform b	189011546	47	5	11	7
730	3-mercaptopyruvate sulfurtransferase isoform 2	61835204	33	2	14	7

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
731	ubiquitin-conjugating enzyme E2 L3	4507789	18	3	30	7
732	endoplasmic reticulum lectin 1 isoform 2 precursor	188528696	52	3	11	7
733	acyl-CoA-binding protein isoform 5	295842514	14	3	36	7
734	40S ribosomal protein S18	11968182	18	3	18	7
735	ubiquitin thioesterase OTUB2	12962939	27	3	16	7
736	spondin-2 precursor	6912682	36	3	8.50	7
737	agouti-related protein precursor	4501995	14	2	15	7
738	V-type proton ATPase subunit E 1 isoform a	4502317	26	2	12	7
739	sperm-associated antigen 11B isoform D preproprotein	126131097	15	2	17	7
740	dynein intermediate chain 1, axonemal	6912338	79	4	6.20	7
741	transmembrane protein 126A isoform 1	14150017	22	2	24	7
742	retinol dehydrogenase 11 isoform 1 precursor	166795268	35	3	15	7
743	heat shock 70 protein 4	38327039	94	3	4.30	7
744	40S ribosomal protein S17	4506693	16	3	43	7
745	platelet-activating factor acetylhydrolase IB subunit beta isoform a	4505585	26	3	17	7
746	protein EAN57 isoform 1	255759947	31	3	10	7
747	low molecular weight phosphotyrosine protein phosphatase isoform c	4757714	18	3	20	7
748	ankyrin repeat domain-containing protein 45	38348298	30	3	14	7
749	40S ribosomal protein S4, X isoform X isoform	4506725	30	3	11	7
750	cat eye syndrome critical region protein 5 isoform 2 precursor	14861834	46	4	18	7
751	profilin-3	71274140	15	2	18	7
752	ADP-ribosylation factor-like protein 3	4757774	20	3	28	7
753	azurocidin preproprotein	11342670	27	4	32	7
754	prohibitin-2 isoform 2	6005854	33	3	14	7
755	coiled-coil domain-containing protein 90B, mitochondrial precursor	20149663	30	3	15	7
756	endoplasmic reticulum-Golgi intermediate compartment protein 1	72534712	33	3	16	7
757	centrin-1	4757974	20	3	24	7
758	fructose-1,6-bisphosphatase 1	189083692	37	3	14	7
759	ras-related protein Rab-27A	34485709	25	2	15	7
760	myeloid-associated differentiation marker	19923903	35	2	10	7
761	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial precursor	4758792	14	3	20	6
762	apolipoprotein A-IV precursor	71773110	45	4	13	6
763	calicin	169636428	67	4	9.90	6
764	nidogen-1 precursor	115298674	136	4	4.20	6
765	V-type proton ATPase subunit B, brain isoform	19913428	57	3	12	6
766	nucleosome assembly protein 1-like 4	5174613	43	2	8.50	6
767	UPF0556 protein C19orf10 precursor	33457348	19	3	22	6
768	myotrophin	21956645	13	2	25	6
769	72 type IV collagenase isoform a preproprotein	11342666	74	2	4.70	6
770	cystatin-C precursor	4503107	16	2	18	6
771	PREDICTED: hypothetical protein LOC728597	341914388	72	3	4.90	6
772	trafficking protein particle complex subunit 3	7656926	20	3	19	6
773	complement decay-accelerating factor isoform 2 precursor	168693643	49	3	10	6
774	serine/threonine-protein phosphatase 2A activator isoform b	29725611	37	2	8.00	6
775	aspartyl-tRNA synthetase, cytoplasmic	45439306	57	3	9.20	6
776	uncharacterized protein C9orf135	58219541	26	3	21	6
777	dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3A	22749415	81	3	4.30	6
778	myeloperoxidase precursor	4557759	84	3	5.50	6
779	Sjogren syndrome nuclear autoantigen 1	189571687	14	2	20	6
780	dipeptidase 1 precursor	4758190	46	2	8.30	6
781	cytochrome c oxidase subunit 6C proprotein	4758040	9	2	28	6
782	dynein light chain roadblock-type 2	18702323	11	2	29	6
783	transketolase-like protein 1 isoform b	225637461	65	2	5.10	6
784	transketolase-like protein 2	133778974	68	3	7.80	6
785	glycerol-3-phosphate dehydrogenase 1-like protein	24307999	38	2	4.80	6

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## Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
786	ectonucleotide pyrophosphatase/phosphodiesterase family member 3	111160296	100	3	5.60	6
787	alcohol dehydrogenase class-3	71565154	40	2	4.80	6
788	60S ribosomal protein L18	4506607	22	2	14	6
789	cysteine desulfurase, mitochondrial isoform a	32307132	50	3	10	6
790	ras-related protein Rap-1b isoform 1 precursor	7661678	21	3	19	6
791	arginyl-tRNA synthetase, cytoplasmic	15149476	75	3	5.00	6
792	late cornified envelope-like proline-rich protein 1	58082087	11	2	42	6
793	NAD-dependent malic enzyme, mitochondrial isoform 1 precursor [Homo	4505145	65	3	11	6
794	protein TSC21	22749357	21	4	27	6
795	nuclear pore complex protein Nup205	57634534	228	4	2.30	6
796	3-oxoacyl-[acyl-carrier-protein] synthase, mitochondrial isoform 1	8923559	49	3	15	6
797	carboxypeptidase M precursor	6631081	51	2	3.80	6
798	heat shock 70 protein 13 precursor	48928056	52	2	5.50	6
799	tripeptidyl-peptidase 1 preproprotein	5729770	61	2	5.70	6
800	elongation factor Ts, mitochondrial isoform 2 precursor [Homo	171846268	35	2	14	6
801	epoxide hydrolase 2	27597073	63	2	2.70	6
802	WAP four-disulfide core domain protein 8 precursor	153946389	28	3	17	6
803	ATP synthase subunit e, mitochondrial	6005717	8	2	30	6
804	destrin isoform a	5802966	19	2	17	6
805	tenascin precursor	153946395	241	4	2.40	6
806	peptidase inhibitor 15 preproprotein	7705676	29	2	10	6
807	ferritin light chain	20149498	20	2	18	6
808	cytochrome b5 isoform 1	41281768	15	2	20	6
809	secretoglobin family 1D member 2 precursor	5729909	10	2	22	6
810	vesicle-trafficking protein SEC22b precursor	94429050	25	2	15	6
811	ATP synthase subunit s, mitochondrial isoform a precursor [Homo	51558774	25	2	9.30	6
812	cornulin	7706635	54	2	9.70	6
813	protamine-2	68989267	13	2	27	6
814	uncharacterized protein C19orf71	207442677	24	2	14	6
815	S-formylglutathione hydrolase	33413400	31	2	16	6
816	cell cycle control protein 50A isoform 1	8922720	41	3	12	6
817	cytochrome b5 domain-containing protein 1	40255060	27	2	11	6
818	uncharacterized protein LOC100130705	304376316	20	3	19	6
819	neutrophil gelatinase-associated lipocalin precursor	38455402	23	4	27	6
820	protein ALEX XLas	117938759	111	2	2.60	6
821	transforming protein RhoA precursor	10835049	22	3	23	6
822	40S ribosomal protein S25	4506707	14	2	16	6
823	ATP5J2-PTCD1 fusion protein	311893396	84	2	3.20	6
824	beta-hexosaminidase subunit alpha preproprotein	189181666	61	2	4.20	6
825	60S ribosomal protein L24	4506619	18	2	13	6
826	out at first protein homolog precursor	30425438	31	2	10	6
827	NSFL1 cofactor p47 isoform d	332078466	41	2	7.00	6
828	26S proteasome non-ATPase regulatory subunit 12 isoform 1	4506221	53	2	7.50	5
829	hornerin	57864582	282	3	2.30	5
830	sarcoplasmic/endoplasmic reticulum calcium ATPase 2 isoform b	24638454	115	3	4.00	5
831	peptidyl-prolyl cis-trans isomerase FKBP4	4503729	52	2	6.10	5
832	26S proteasome non-ATPase regulatory subunit 6	7661914	46	3	11	5
833	histone H2A-Bbd type 2/3	63029935	13	2	30	5
834	calpain-1 catalytic subunit	311893363	82	2	3.10	5
835	cytochrome b-c1 complex subunit 6, mitochondrial	83627705	11	2	27	5
836	cystatin-S precursor	4503109	16	2	18	5
837	glycyl-tRNA synthetase precursor	116805340	83	3	4.60	5
838	60S ribosomal protein L7	15431301	29	3	18	5
839	GTP-binding protein SAR1a	217416369	22	3	15	5
840	importin-4	62460637	119	3	3.50	5

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**Supplementary Table 4: Contd...**

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
841	CMT1A duplicated region transcript 15 protein	56090618	21	2	21	5
842	translocon-associated protein subunit delta isoform 3 precursor	325301078	20	2	13	5
843	apolipoprotein O precursor	13129148	22	2	11	5
844	thioredoxin domain-containing protein 17	14249348	14	2	15	5
845	UPF0577 protein KIAA1324 precursor	38569482	111	3	3.60	5
846	homogentisate 1,2-dioxygenase	115527117	50	2	8.10	5
847	60S ribosomal protein L11 isoform 1	15431290	20	2	13	5
848	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial precursor	4505369	20	3	19	5
849	ADP-ribosylation factor-like protein 8B	8922601	22	3	22	5
850	uncharacterized protein C22orf43	56118955	25	2	9.60	5
851	guanine nucleotide-binding protein subunit beta-2-like 1	5174447	35	2	8.50	5
852	SPRY domain-containing protein 7 isoform 1	20531765	22	3	29	5
853	B-cell receptor-associated protein 31 isoform a	213511508	35	2	6.40	5
854	endoplasmic reticulum-Golgi intermediate compartment protein 2	50959176	43	2	6.90	5
855	ubiquitin carboxyl-terminal hydrolase isozyme L1	21361091	25	2	14	5
856	uncharacterized protein C20orf85	30425380	16	2	21	5
857	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial precursor	4826854	22	3	21	5
858	coiled-coil domain-containing protein 164	217416374	87	3	4.70	5
859	protein phosphatase 1 regulatory subunit 32 isoform 1	283046778	47	2	6.10	5
860	outer dense fiber protein 3B	116292180	27	2	8.70	5
861	15 selenoprotein isoform 1 precursor	42741648	18	2	18	5
862	probable ergosterol biosynthetic protein 28	6005719	16	2	17	5
863	SUN domain-containing protein 3	71834868	41	3	8.10	5
864	uncharacterized protein C1orf194	171916088	18	3	36	5
865	protein NDRG3 isoform a	14165266	41	3	14	5
866	60S ribosomal protein L28 isoform 2	13904866	16	3	22	5
867	60S ribosomal protein L14	78000181	23	2	11	5
868	platelet-activating factor acetylhydrolase IB subunit alpha	4557741	47	2	9.50	5
869	up-regulated during skeletal muscle growth protein 5	14249376	6	2	43	5
870	lysozyme-like protein 6 precursor	9966905	17	2	24	5
871	glycerol kinase isoform a	42794763	58	2	6.00	5
872	ATP synthase-coupling factor 6, mitochondrial isoform a precursor	18644883	13	2	31	5
873	mitochondrial fission 1 protein	151108473	17	3	26	5
874	protein CutA isoform 1	62198241	21	2	21	5
875	sperm-associated antigen 11B isoform A preproprotein	7706551	11	2	19	5
876	fibrinogen-like protein 1 precursor	42544189	36	3	9.90	5
877	thioredoxin domain-containing protein 12 precursor	7705696	19	2	14	5
878	arrestin domain-containing protein 5	122937478	38	2	8.20	5
879	beta-defensin 105 precursor	103485141	9	2	26	5
880	protein transport protein Sec61 subunit beta	5803165	10	2	27	5
881	uncharacterized protein LOC145788	311771669	14	3	36	5
882	cytoskeleton-associated protein 4	19920317	66	2	5.60	5
883	programmed cell death 6-interacting protein isoform 1	22027538	96	2	3.30	5
884	apolipoprotein A-I-binding protein precursor	91984773	32	2	10	5
885	glucosamine-6-phosphate isomerase 1	13027378	33	3	13	5
886	isoleucyl-tRNA synthetase, cytoplasmic	94721239	145	2	1.60	5
887	histidine triad nucleotide-binding protein 3	189217863	20	2	13	5
888	RIB43A-like with coiled-coils protein 1 isoform 1	72534784	44	3	16	5
889	40S ribosomal protein S7	4506741	22	2	18	5
890	reactive oxygen species modulator 1	18152785	8	2	35	5
891	beta-defensin 106 precursor	22748611	7	2	23	5
892	lipolysis-stimulated lipoprotein receptor isoform 1	45505163	70	2	4.60	5
893	protein S100-A6	7657532	10	2	17	5
894	synaptogyrin-1 isoform 1b	22035698	21	3	23	5
895	40S ribosomal protein S28	4506715	8	2	30	5

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## Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
896	torsin-1A-interacting protein 1	39753957	66	2	4.50	5
897	deoxyguanosine kinase, mitochondrial isoform a precursor	18426967	32	3	18	4
898	adenylate kinase domain-containing protein 1 isoform 1	237858799	221	2	0.99	4
899	glucosamine-fructose-6-phosphate aminotransferase [isomerizing] 1 isoform 1	347659028	79	4	8.00	4
900	basigin isoform 2 precursor	38372925	29	3	16	4
901	isovaleryl-CoA dehydrogenase, mitochondrial isoform 1 precursor	226958412	47	3	10	4
902	coiled-coil domain-containing protein 151	117553613	69	3	5.70	4
903	matrilin-2 isoform a precursor	62548860	107	2	2.70	4
904	profilin-2 isoform a	16753215	15	2	19	4
905	BAG family molecular chaperone regulator 5 isoform b	6631077	51	2	6.00	4
906	40S ribosomal protein S9	14141193	23	2	8.80	4
907	coiled-coil domain-containing protein 42A isoform 1	226494053	38	2	9.50	4
908	40S ribosomal protein S16	4506691	16	2	14	4
909	acyl-coenzyme A thioesterase 13 isoform 2	231567183	12	2	26	4
910	vitronectin precursor	88853069	54	2	6.50	4
911	thiosulfate sulfurtransferase/rhodanese-like domain-containing protein 1 isoform 1	163965377	13	2	20	4
912	titin isoform N2-A	291045225	3713	2	0.05	4
913	60S ribosomal protein L22 proprotein	4506613	15	2	19	4
914	40S ribosomal protein S20 isoform 1	226246671	16	2	19	4
915	protein sel-1 homolog 1 isoform 1 precursor	19923669	89	2	4.90	4
916	L-amino-acid oxidase isoform 2 precursor	27477089	65	3	9.20	4
917	chitinase domain-containing protein 1 isoform a	218083142	45	2	9.70	4
918	coiled-coil domain-containing protein 40 isoform 1	148664197	130	3	3.00	4
919	platelet-activating factor acetylhydrolase precursor	270133071	50	2	9.80	4
920	glutathione S-transferase omega-2 isoform 1	38016131	28	2	9.50	4
921	ethanolamine-phosphate cytidyltransferase isoform 1	296841136	46	2	6.90	4
922	mitochondrial 2-oxoglutarate/malate carrier protein isoform 1	21361114	34	2	7.00	4
923	vesicle-associated membrane protein 8	14043026	11	2	23	4
924	cytochrome c oxidase subunit 7C, mitochondrial precursor	4502993	7	2	29	4
925	eukaryotic translation initiation factor 3 subunit K	10801345	25	2	11	4
926	proactivator polypeptide isoform a preproprotein	11386147	58	2	3.40	4
927	transmembrane emp24 domain-containing protein 1 precursor	5803040	25	2	12	4
928	iron-sulfur cluster assembly enzyme ISCU, mitochondrial isoform ISCU2 precursor	56699456	18	2	16	4
929	COP9 signalosome complex subunit 7b	12232385	30	2	10	4
930	PITH domain-containing protein 1	21361837	24	2	18	4
931	40S ribosomal protein S27	4506711	9	2	25	4
932	uncharacterized protein C6orf163	256600247	39	2	9.10	4
933	beta-defensin 126 preproprotein	13624333	12	2	8.10	4
934	uncharacterized protein C2orf77	146260271	66	3	6.70	4
935	uncharacterized protein C2orf74 isoform 1	221139892	22	2	18	4
936	uncharacterized protein C7orf72	332634960	50	2	11	4
937	suppressor of G2 allele of SKP1 homolog isoform SGT1B [Homo	195963398	41	3	11	4
938	40S ribosomal protein S12	14277700	15	2	14	4
939	acetyl-CoA acetyltransferase, cytosolic	148539872	41	2	7.80	4
940	exportin-2	29029559	110	2	2.40	4
941	60S acidic ribosomal protein P1 isoform 1	4506669	12	2	57	4
942	biglycan preproprotein	4502403	42	2	8.70	4
943	uncharacterized protein C19orf18 precursor	22748999	24	2	9.80	4
944	retinoic acid receptor responder protein 1 isoform 2 precursor	46255041	26	2	9.60	4
945	uncharacterized protein C2orf61 isoform 1	254675143	28	2	13	4
946	dickkopf-like protein 1 isoform 2 precursor	308818218	24	2	9.50	4
947	actin-related protein 2/3 complex subunit 4 isoform c	311771647	22	2	11	4
948	glutaminy-peptide cyclotransferase precursor	6912618	41	2	6.90	4
949	UPF0573 protein C2orf70	157502167	23	2	17	4
950	ubiquitin-conjugating enzyme E2 variant 1 isoform d	73765546	16	2	18	4

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Supplementary Table 4: Contd...

No.	Gel 3					
	Protein	Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
951	40S ribosomal protein S11	4506681	18	2	11	4
952	60S ribosomal protein L30	4506631	13	3	31	4
953	transketolase	205277463	68	3	9.50	4
954	tropomyosin alpha-4 chain isoform 1	223555975	33	2	8.10	4
955	disintegrin and metalloproteinase domain-containing protein 32	148664238	88	2	3.30	4
956	60S ribosomal protein L35a	16117791	13	3	22	4
957	inorganic pyrophosphatase	11056044	33	3	18	4
958	phosphatidylinositol-5-phosphate 4-kinase type-2 gamma isoform a	226371739	47	3	11	4
959	prostaglandin reductase 1 isoform 1	226059133	36	2	5.50	4
960	2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial isoform	11386135	50	2	8.50	4
961	nucleoporin NDC1 isoform 1	271398350	76	2	4.70	4
962	cytochrome b-c1 complex subunit 9 isoform a	41281885	7	2	38	4
963	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 11, mitochondrial isoform 1	20127561	18	2	11	4
964	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 9 isoform	6274550	22	2	16	4
965	phosphatidylinositol transfer protein alpha isoform	5453908	32	2	13	4
966	ran guanine nucleotide release factor isoform B	295317377	16	2	21	4
967	dehydrogenase/reductase SDR family member 7B	20149619	35	2	8.90	4
968	isochorismatase domain-containing protein 1	103471987	32	2	9.70	4
969	ubiquitin-conjugating enzyme E2 N	4507793	17	2	23	3
970	serine/threonine-protein phosphatase with EF-hands 1 isoform 1b	23312374	73	2	4.60	3
971	thioredoxin reductase 2, mitochondrial precursor	22035672	57	3	13	3
972	non-specific lipid-transfer protein isoform 1 proprotein	19923233	59	2	4.20	3
973	DNA damage-binding protein 1	148529014	127	2	1.80	3
974	60S ribosomal protein L23	4506605	15	2	17	3
975	protein FAM162A	49355721	17	2	20	3
976	prostate and testis expressed protein 2 precursor	47086459	13	3	29	3
977	poly (rC)-binding protein 2 isoform b	14141166	38	2	9.70	3
978	vacuolar protein sorting-associated protein 13A isoform A	66346674	360	2	0.85	3
979	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	4826848	13	2	8.60	3
980	clathrin light chain A isoform a	4502899	24	2	14	3
981	protein BRICK1	27544939	9	2	28	3
982	neuropilin-1 isoform a precursor	182508169	103	2	3.40	3
983	kinesin-1 heavy chain	4758648	110	2	2.60	3
984	dnaJ homolog subfamily C member 3 precursor	5453980	58	2	10	3
985	nucleosome assembly protein 1-like 1	4758756	45	2	6.10	3
986	metaxin-2	5729937	30	2	11	3
987	NADH dehydrogenase [ubiquinone] iron-sulfur protein 5	4758790	13	2	18	3
988	myosin-VI	92859701	149	2	1.90	3
989	ribose-phosphate pyrophosphokinase 2 isoform 2	4506129	35	3	11	3
990	cartilage acidic protein 1 isoform B precursor	330688397	70	2	6.70	3
991	polyadenylate-binding protein 1	46367787	71	3	5.80	3
992	importin subunit alpha-4	34485722	58	2	7.30	3
993	peptidyl-prolyl cis-trans isomerase FKBP2 precursor	17149842	16	2	18	3
994	secreted frizzled-related protein 1 precursor	56117838	35	2	8.90	3
995	eukaryotic translation initiation factor 3 subunit M	23397429	43	2	8.00	3
996	heat shock protein beta-11	118343647	16	2	28	3
997	nodal modulator 3 precursor	51944969	134	2	2.00	3
998	actin-related protein 2 isoform b	5031571	45	2	7.40	3
999	peptidase M20 domain-containing protein 2	58082085	48	2	7.60	3
1000	prostaglandin-H2 D-isomerase precursor	32171249	21	2	12	3
1001	annexin A13 isoform a	51895795	35	2	8.20	3
1002	low-density lipoprotein receptor-related protein 2 precursor	126012573	522	2	0.49	3
1003	6-phosphofructokinase, liver type	48762920	85	2	3.60	3
1004	IanC-like protein 1	212274337	45	2	6.30	3
1005	amyloid beta A4 protein isoform d	209862833	85	2	3.50	3

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Supplementary Table 4: Contd...

No.	Protein	Gel 3				
		Accession number	Mass (kDa)	Peptides number	Sequence coverage (%)	Spectral counts
1006	serine/threonine-protein phosphatase 2B catalytic subunit gamma isoform isoform 1	345842412	59	2	5.60	3
1007	long-chain-fatty-acid--CoA ligase 3	42794752	80	2	4.20	3
1008	transforming growth factor beta receptor type 3 isoform b precursor	307574634	93	2	4.10	3
1009	actin-related protein 2/3 complex subunit 3	5031597	21	2	13	3
1010	beta-1,4-galactosyltransferase 1	13929462	44	2	6.80	3
1011	60S ribosomal protein L29	4506629	18	2	14	3
1012	ubiquitin carboxyl-terminal hydrolase 7	150378533	128	2	2.70	2
1013	ATP synthase subunit delta, mitochondrial precursor	50345991	17	2	14	2
1014	F-actin-capping protein subunit alpha-2	5453599	33	2	12	2
1015	quinone oxidoreductase isoform a	13236495	35	2	7.90	2
1016	ras-related protein Rab-18	10880989	23	2	12	2
1017	4F2 cell-surface antigen heavy chain isoform c	65506891	68	2	4.10	2
1018	hsp90 co-chaperone Cdc37	5901922	44	2	11	2
1019	mannosyl-oligosaccharide glucosidase isoform 1	149999606	92	2	3.60	2
1020	BAG family molecular chaperone regulator 2	4757834	24	2	11	2
1021	zona pellucida-binding protein 2 isoform 1 precursor	84875535	36	2	7.30	2
1022	proliferation-associated protein 2G4	124494254	44	2	8.60	2
1023	prostate and testis expressed protein 4	221554530	11	2	23	2
1024	Na(+)/H(+) exchange regulatory cofactor NHE-RF1	4759140	39	2	6.70	2
1025	SPARC-related modular calcium-binding protein 1 isoform 2 precursor	11545873	48	2	5.50	2
1026	glutaredoxin-3	95113651	37	2	15	2
1027	60S ribosomal protein L13 isoform 1	15431295	24	2	9.00	2
1028	NADPH--cytochrome P450 reductase	127139033	77	2	4.90	2
1029	aminoacyl tRNA synthase complex-interacting multifunctional protein 2	11125770	35	2	11	2
1030	nesprin-1 isoform 1	330688408	1011	2	0.33	2
1031	coiled-coil domain-containing protein 11	94721321	62	2	7.20	2
1032	cadherin EGF LAG seven-pass G-type receptor 1 precursor	7656967	329	2	1.00	2
1033	AMY-1-associating protein expressed in testis 1	38569419	90	2	3.10	2
1034	dnaJ homolog subfamily C member 5	45504382	22	2	8.60	2
1035	endoribonuclease Dicer isoform 1	29294651	219	2	1.20	2
1036	ATP-binding cassette sub-family B member 6, mitochondrial	9955963	94	2	3.30	2
1037	septin-10 isoform 1	21945064	53	2	6.20	2
1038	tetratricopeptide repeat protein 18	229577238	126	2	2.10	2
1039	peptidyl-prolyl cis-trans isomerase FKBP3	4503727	25	2	12	2
1040	prostate and testis expressed protein 3 precursor	222136622	12	2	16	2
1041	calcineurin subunit B type 1	4506025	19	2	29	2
1042	haloacid dehalogenase-like hydrolase domain- containing protein 2	14149777	29	2	14	2