Supplemental Material

Supplemental Material, Table 1. Identity of 203 unique proteins identified in umbilical cord serum by liquid chromatography tandem mass spectrometry.

N	Unused	Total	% Coverage	Accessions	Names [a]	# Unique Peptides	# MS/MS
1	167.9 [b]	167.9 [c]	71.3	A2MG_HUMAN (P01023) [d]	Alpha-2-macroglobulin precursor	63	1574
2	103.2	103.2	50.4	FINC_HUMAN (P02751)	Fibronectin precursor	45	470
3	93.8	93.8	84.0	VTDB_HUMAN (P02774)	Vitamin D-binding protein precursor	48	1298
4	88.1	88.1	78.2	A1BG_HUMAN (P04217)	Alpha-1B-glycoprotein precursor	27	728
5	85.9	85.9	60.8	CFAH_HUMAN (P08603)	Complement factor H precursor	34	540
6	72.5	72.5	80.4	FETUA_HUMAN (P02765)	Alpha-2-HS-glycoprotein precursor	25	1278
7	72.4	72.4	69.1	ITIH4_HUMAN (Q14624)	Inter-alpha-trypsin inhibitor heavy chain H4 precursor	29	412
8	72.0	72.0	64.0	FETA_HUMAN (P02771)	Alpha-fetoprotein precursor	28	446
9	67.3	67.3	70.0	ITIH1_HUMAN (P19827)	Inter-alpha-trypsin inhibitor heavy chain H1 precursor	23	674
10	64.7	64.7	63.8	THRB_HUMAN (P00734)	Prothrombin precursor	22	257
11	63.4	63.4	56.0	CFAB_HUMAN (P00751)	Complement factor B precursor	24	370
12	59.6	59.6	52.2	ITIH2_HUMAN (P19823)	Inter-alpha-trypsin inhibitor heavy chain H2 precursor	23	851
13	57.0	57.0	67.2	ANGT_HUMAN (P01019)	Angiotensinogen precursor	20	546
14	53.3	53.3	61.9	GELS_HUMAN (P06396)	Gelsolin precursor	21	298
15	50.7	50.7	70.1	APOH_HUMAN (P02749)	Beta-2-glycoprotein 1 precursor	14	449
16	49.3	49.3	67.5	HEMO_HUMAN (P02790)	Hemopexin precursor	13	552
17	49.2	49.2	56.6	IC1_HUMAN (P05155)	Plasma protease C1 inhibitor precursor	15	411
18	48.9	48.9	52.0	CO5_HUMAN (P01031)	Complement C5 precursor	18	320
19	47.2	47.2	58.8	ITIH3_HUMAN (Q06033)	Inter-alpha-trypsin inhibitor heavy chain H3 precursor	22	250
20	46.8	46.8	51.1	CO7_HUMAN (P10643)	Complement component C7 precursor	23	234
21	44.0	44.0	54.2	ALBU_HUMAN (P02768)	Serum albumin precursor	23	197
22	42.0	42.0	62.5	PGRP2_HUMAN (Q96PD5)	N-acetylmuramoyl-L-alanine amidase precursor	15	203

23	39.4	39.4	76.6	HBA_HUMAN (P69905)	Hemoglobin alpha subunit	8	316
24	37.3	37.3	48.1	KNG1_HUMAN (P01042)	Kininogen-1 precursor	16	260
25	35.9	35.9	76.3	ANT3_HUMAN (P01008)	Antithrombin-III precursor	14	557
26	33.0	33.0	75.9	VTNC_HUMAN (P04004)	Vitronectin precursor	12	299
27	32.2	32.2	48.2	AFAM_HUMAN (P43652)	Afamin precursor	15	331
28	30.5	30.5	57.0	A2AP_HUMAN (P08697)	Alpha-2-antiplasmin precursor	11	256
29	30.2	30.2	49.7	CO2_HUMAN (P06681)	Complement C2 precursor	13	137
30	29.5	29.5	72.4	AMBP_HUMAN (P02760)	AMBP protein precursor	11	265
31	27.0	27.0	66.9	APOA4_HUMAN (P06727)	Apolipoprotein A-IV precursor	10	188
32	27.0	27.0	40.2	TSP1_HUMAN (P07996)	Thrombospondin-1 precursor	14	82
33	26.6	26.6	44.0	CO6_HUMAN (P13671)	Complement component C6 precursor	16	110
34	26.0	26.0	60.5	PEDF_HUMAN (P36955)	Pigment epithelium-derived factor precursor	11	112
35	24.8	24.8	28.6	VWF_HUMAN (P04275)	Von Willebrand factor precursor	10	156
36	24.3	24.3	69.5	AACT_HUMAN (P01011)	Alpha-1-antichymotrypsin precursor	8	329
37	24.0	24.0	50.1	POSTN_HUMAN (Q15063)	Periostin precursor	11	78
38	23.2	23.2	29.9	HRG_HUMAN (P04196)	Histidine-rich glycoprotein precursor	8	71
39	23.0	23.0	62.1	IGHG1_HUMAN (P01857)	Ig gamma-1 chain C region	4	179
40	22.6	22.6	49.7	LUM_HUMAN (P51884)	Lumican precursor	8	203
41	22.4	22.4	83.6	HBG2_HUMAN (P69892)	Hemoglobin gamma-2 subunit	1	278
42	21.4	21.4	52.1	ALS_HUMAN (P35858)	Insulin-like growth factor-binding protein complex acid labile chain precursor	7	101
43	20.7	20.7	62.4	ZA2G_HUMAN (P25311)	Zinc-alpha-2-glycoprotein precursor	9	144
44	20.4	20.4	43.4	CLUS_HUMAN (P10909)	Clusterin precursor	6	112
45	19.9	19.9	30.3	FA5_HUMAN (P12259)	Coagulation factor V precursor	9	95
46	19.2	19.2	54.5	THBG_HUMAN (P05543)	Thyroxine-binding globulin precursor	9	122
47	18.8	18.8	46.6	CPN2_HUMAN (P22792)	Carboxypeptidase N subunit 2 precursor	8	90
48	18.5	18.5	46.8	KAIN_HUMAN (P29622)	Kallistatin precursor	8	84
49	18.2	20.2	74.0	HBB_HUMAN (P68871)	Hemoglobin beta subunit	3	166
50	18.1	18.1	43.1	C1R_HUMAN	Complement C1r subcomponent	8	59

				(P00736)	precursor		
51	18.0	18.0	48.9	CFAI_HUMAN (P05156)	Complement factor I precursor	9	69
52	17.4	17.4	22.3	ATRN_HUMAN (O75882)	Attractin precursor	8	75
53	17.1	17.1	79.8	APOE_HUMAN (P02649)	Apolipoprotein E precursor	7	131
54	17.1	17.1	47.2	FA12_HUMAN (P00748)	Coagulation factor XII precursor	8	59
55	16.4	16.4	61.6	PON1_HUMAN (P27169)	Serum paraoxonase/arylesterase 1	7	42
56	16.2	16.2	62.9	APOA1_HUMAN (P02647)	Apolipoprotein A-I precursor	8	128
57	16.0	16.1	27.4	TENX_HUMAN (P22105)	Tenascin-X precursor	8	140
58	15.9	16.9	46.3	HEP2_HUMAN (P05546)	Heparin cofactor 2 precursor	7	116
59	15.6	15.6	54.2	LG3BP_HUMAN (Q08380)	Galectin-3-binding protein precursor	6	67
60	15.3	15.3	55.5	K2C1_HUMAN (P04264)	Keratin, type II cytoskeletal 1	1	60
61	15.0	15.0	46.7	KLKB1_HUMAN (P03952)	Plasma kallikrein precursor	8	66
62	14.3	14.3	30.9	ECM1_HUMAN (Q16610)	Extracellular matrix protein 1 precursor	8	71
63	14.2	14.3	42.7	CBG_HUMAN (P08185)	Corticosteroid-binding globulin precursor	5	91
64	14.0	14.0	27.6	COMP_HUMAN (P49747)	Cartilage oligomeric matrix protein precursor	5	44
65	13.5	13.5	34.4	CO3_HUMAN (P01024)	Complement C3 precursor	7	126
66	13.4	13.4	33.1	C1S_HUMAN (P09871)	Complement C1s subcomponent precursor	6	35
67	13.3	13.3	30.0	F13B_HUMAN (P05160)	Coagulation factor XIII B chain precursor	6	33
68	13.1	13.1	80.2	KAC_HUMAN (P01834)	Ig kappa chain C region	5	45
69	12.6	12.6	42.5	C4BP_HUMAN (P04003)	C4b-binding protein alpha chain precursor	6	33
70	11.7	11.7	46.1	BGH3_HUMAN (Q15582)	Transforming growth factor-beta-induced protein ig-h3 precursor	5	44
71	11.6	11.6	44.4	A2GL_HUMAN (P02750)	Leucine-rich alpha-2-glycoprotein precursor	5	75
72	11.4	11.4	63.0	APOA2_HUMAN (P02652)	Apolipoprotein A-II precursor	3	78
73	11.1	11.1	30.4	CADH5_HUMAN (P33151)	Vascular endothelial-cadherin precursor	6	39
74	10.9	10.9	44.4	VCAM1_HUMAN (P19320)	Vascular cell adhesion protein 1 precursor	4	44
75	10.8	17.7	58.3	IGHG2_HUMAN (P01859)	Ig gamma-2 chain C region	2	64
76	10.0	10.0	40.8	CO8A_HUMAN (P07357)	Complement component C8 alpha chain precursor	5	114
77	9.6	9.6	33.4	HGFA_HUMAN (Q04756)	Hepatocyte growth factor activator precursor	4	38
78	9.5	9.5	36.2	CO4B_HUMAN	Complement C4-B precursor	5	36

				(P0C0L5)			
78	1.0	8.8	36.2	CO4A_HUMAN (P0C0L4)	Complement C4-A precursor	3	90
79	9.5	9.5	50.5	APOC2_HUMAN (P02655)	Apolipoprotein C-II precursor	5	26
80	9.4	9.4	27.5	PGBM_HUMAN (P98160)	Basement membrane-specific heparan sulfate proteoglycan core protein precursor	5	177
81	9.1	9.1	35.8	CBPN_HUMAN (P15169)	Carboxypeptidase N catalytic chain precursor	4	30
82	8.6	8.6	29.1	HGFL_HUMAN (P26927)	Hepatocyte growth factor-like protein precursor	4	25
83	8.3	8.3	56.5	CD14_HUMAN (P08571)	Monocyte differentiation antigen CD14 precursor	3	35
84	8.1	8.1	25.7	CO8B_HUMAN (P07358)	Complement component C8 beta chain precursor	5	25
85	8.0	8.0	35.8	SHBG_HUMAN (P04278)	Sex hormone-binding globulin precursor	4	41
86	8.0	8.0	40.6	SCYB7_HUMAN (P02775)	Platelet basic protein precursor	4	42
87	8.0	8.0	35.8	VASN_HUMAN (Q6EMK4)	Vasorin precursor	2	64
88	8.0	8.0	19.3	FBLN1_HUMAN (P23142)	Fibulin-1 precursor	4	21
89	7.9	7.9	45.3	SAMP_HUMAN (P02743)	Serum amyloid P-component precursor	2	37
90	7.5	7.5	49.0	TETN_HUMAN (P05452)	Tetranectin precursor	4	38
91	7.2	7.2	31.6	LBP_HUMAN (P18428)	Lipopolysaccharide-binding protein precursor	2	17
92	7.2	7.2	26.4	SPRC_HUMAN (P09486)	SPARC precursor	3	20
93	7.2	7.2	36.3	CO6A3_HUMAN (P12111)	Collagen alpha-3	2	239
94	7.1	7.1	48.2	CFAD_HUMAN (P00746)	Complement factor D precursor	2	31
95	7.0	7.0	28.3	GP1BA_HUMAN (P07359)	Platelet glycoprotein Ib alpha chain precursor	4	28
96	6.9	6.9	62.7	RETBP_HUMAN (P02753)	Plasma retinol-binding protein precursor	3	55
97	6.9	6.9	39.4	APOM_HUMAN (O95445)	Apolipoprotein M	3	12
98	6.7	6.7	37.3	BTD_HUMAN (P43251)	Biotinidase precursor	3	45
99	6.7	6.7	24.0	NCA12_HUMAN (P13592)	Neural cell adhesion molecule 1, 120 kDa isoform precursor	3	21
100	6.5	6.5	25.4	APOB_HUMAN (P04114)	Apolipoprotein B-100 precursor	2	180
101	6.3	6.3	20.9	CHLE_HUMAN (P06276)	Cholinesterase precursor	3	32
102	6.3	8.3	23.5	TSP4_HUMAN (P35443)	Thrombospondin-4 precursor	2	49
103	6.3	6.3	49.8	A1AT_HUMAN (P01009)	Alpha-1-antitrypsin precursor	3	42
104	6.2	6.2	20.3	FIBA_HUMAN (P02671)	Fibrinogen alpha chain precursor	3	38

105	6.1	6.1	32.4	ADIPO_HUMAN (Q15848)	Adiponectin precursor	3	51
106	6.0	6.0	48.7	GPX3_HUMAN (P22352)	Glutathione peroxidase 3 precursor	3	22
107	6.0	6.0	68.3	CO8G_HUMAN (P07360)	Complement component C8 gamma chain precursor	3	17
108	5.9	5.9	30.5	FA10_HUMAN (P00742)	Coagulation factor X precursor	2	42
109	5.8	5.8	59.8	APOD_HUMAN (P05090)	Apolipoprotein D precursor	3	28
110	5.8	5.8	20.7	HABP2_HUMAN (Q14520)	Hyaluronan-binding protein 2 precursor	3	21
111	5.7	5.7	28.3	GGH_HUMAN (Q92820)	Gamma-glutamyl hydrolase precursor	3	13
112	5.6	5.6	42.7	ACTG_HUMAN (P63261)	Actin, cytoplasmic 2	3	35
113	5.5	5.6	51.8	HBAZ_HUMAN (P02008)	Hemoglobin zeta subunit	3	14
114	5.5	5.5	61.0	CYTC_HUMAN (P01034)	Cystatin C precursor	3	21
115	5.4	5.4	29.4	TENA_HUMAN (P24821)	Tenascin precursor	3	85
116	5.3	5.3	59.6	APOC3_HUMAN (P02656)	Apolipoprotein C-III precursor	1	60
117	5.2	5.2	43.2	PTGDS_HUMAN (P41222)	Prostaglandin-H2 D-isomerase precursor	3	17
118	5.2	5.2	20.9	CO9_HUMAN (P02748)	Complement component C9 precursor	3	74
119	4.8	4.8	27.2	AMPN_HUMAN (P15144)	Aminopeptidase N	3	51
120	4.5	4.5	18.2	ENPL_HUMAN (P14625)	Endoplasmin precursor	2	56
121	4.3	4.3	19.8	CADH1_HUMAN (P12830)	Epithelial-cadherin precursor	2	26
122	4.2	4.2	18.9	CBPB2_HUMAN (Q96IY4)	Carboxypeptidase B2 precursor	2	14
123	4.2	4.2	33.0	CADH2_HUMAN (P19022)	Neural-cadherin precursor	2	53
124	4.2	4.2	17.6	MASP1_HUMAN (P48740)	Complement-activating component of Ra-reactive factor precursor	2	14
125	4.2	4.2	45.6	PLTP_HUMAN (P55058)	Phospholipid transfer protein precursor	2	34
126	4.2	4.2	23.8	IBP2_HUMAN (P18065)	Insulin-like growth factor-binding protein 2 precursor	2	18
127	4.1	4.1	66.7	LAC_HUMAN (P01842)	Ig lambda chain C regions	2	14
128	4.1	4.1	36.5	ZPI_HUMAN (Q9UK55)	Protein Z-dependent protease inhibitor precursor	2	25
129	4.0	4.0	57.5	COBA2_HUMAN (P13942)	Collagen alpha-2	1	174
130	4.0	4.0	25.5	NID1_HUMAN (P14543)	Nidogen-1 precursor	2	29
131	4.0	4.0	26.1	TGBR3_HUMAN (Q03167)	TGF-beta receptor type III precursor	2	47
132	4.0	4.0	29.3	TFR1_HUMAN (P02786)	Transferrin receptor protein 1	2	22

133	4.0	4.0	55.0	KV3G_HUMAN (P04206)	Ig kappa chain V-III region GOL	2	11
134	3.8	3.8	33.0	PRDX2_HUMAN (P32119)	Peroxiredoxin-2	2	12
135	3.7	3.7	14.1	DLK_HUMAN (P80370)	Delta-like protein precursor	2	4
136	3.4	3.4	27.8	IPSP_HUMAN (P05154)	Plasma serine protease inhibitor precursor	2	32
137	3.3	3.3	28.5	CO6A1_HUMAN (P12109)	Collagen alpha-1	2	34
138	3.2	3.2	57.8	CO1A1_HUMAN (P02452)	Collagen alpha-1	1	125
139	3.1	3.1	14.7	PROP_HUMAN (P27918)	Properdin precursor	2	17
140	3.0	10.3	59.3	IGHG3_HUMAN (P01860)	Ig gamma-3 chain C region	2	78
141	3.0	3.0	32.3	IBP3_HUMAN (P17936)	Insulin-like growth factor-binding protein 3 precursor	1	15
142	3.0	20.7	82.2	HBG1_HUMAN (P69891)	Hemoglobin gamma-1 subunit	1	263
143	2.9	2.9	55.6	MBL2_HUMAN (P11226)	Mannose-binding protein C precursor	1	38
144	2.8	2.8	55.5	DCD_HUMAN (P81605)	Dermcidin precursor	1	7
145	2.7	2.7	22.6	NRP1_HUMAN (O14786)	Neuropilin-1 precursor	1	43
146	2.7	2.7	17.4	LDHB_HUMAN (P07195)	L-lactate dehydrogenase B chain	1	13
147	2.7	2.7	27.9	CSPG4_HUMAN (Q6UVK1)	Chondroitin sulfate proteoglycan 4 precursor	1	115
148	2.7	2.7	25.2	CETP_HUMAN (P11597)	Cholesteryl ester transfer protein precursor	1	19
149	2.5	13.7	57.8	IGHG4_HUMAN (P01861)	Ig gamma-4 chain C region	1	108
150	2.4	2.4	17.9	NOE1_HUMAN (Q99784)	Noelin precursor	1	12
151	2.4	2.4	14.8	CD44_HUMAN (P16070)	CD44 antigen precursor	1	16
152	2.4	2.4	10.8	SEPP1_HUMAN (P49908)	Selenoprotein P precursor	1	6
153	2.3	2.3	32.7	CAH1_HUMAN (P00915)	Carbonic anhydrase 1	1	13
154	2.2	2.2	42.6	DPEP2_HUMAN (Q9H4A9)	Dipeptidase 2 precursor	1	44
155	2.1	2.1	18.1	MINP1_HUMAN (Q9UNW1)	Multiple inositol polyphosphate phosphatase 1 precursor	1	13
156	2.1	2.1	30.4	PGSG_HUMAN (P10124)	Secretory granule proteoglycan core protein precursor	1	10
157	2.1	2.1	26.5	K1C10_HUMAN (P13645)	Keratin, type I cytoskeletal 10	1	26
158	2.0	2.0	20.9	EGFR_HUMAN (P00533)	Epidermal growth factor receptor precursor	1	47
159	2.0	2.0	16.1	MMP2_HUMAN (P08253)	72 kDa type IV collagenase precursor	1	17
160	2.0	2.0	11.8	A4_HUMAN (P05067)	Amyloid beta A4 protein precursor	1	17

161	2.0	14.3	76.0	HBD_HUMAN (P02042)	Hemoglobin delta subunit	1	137
162	2.0	4.0	29.7	FHR3_HUMAN (Q02985)	Complement factor H-related protein 3 precursor	1	55
163	2.0	2.0	26.8	ROBO1_HUMAN (Q9Y6N7)	Roundabout homolog 1 precursor	1	76
164	2.0	2.0	18.6	NRCAM_HUMAN (Q92823)	Neuronal cell adhesion molecule precursor	1	31
165	2.0	2.0	26.5	GRP78_HUMAN (P11021)	78 kDa glucose-regulated protein precursor	1	22
166	2.0	2.0	15.6	CSF1R_HUMAN (P07333)	Macrophage colony-stimulating factor 1 receptor precursor	1	28
167	2.0	2.0	39.9	GP73_HUMAN (Q8NBJ4)	Golgi phosphoprotein 2	1	24
168	2.0	2.0	27.8	CAD13_HUMAN (P55290)	Cadherin-13 precursor	1	17
169	2.0	2.0	10.9	PTPRG_HUMAN (P23470)	Receptor-type tyrosine-protein phosphatase gamma precursor	1	37
170	2.0	2.0	14.4	G6PE_HUMAN (O95479)	GDH/6PGL endoplasmic bifunctional protein precursor	1	16
171	2.0	2.0	28.6	ICAM1_HUMAN (P05362)	Intercellular adhesion molecule 1 precursor	1	11
172	2.0	2.0	32.8	KV4C_HUMAN (P06314)	Ig kappa chain V-IV region B17 precursor	1	17
173	2.0	2.0	12.3	ENPP2_HUMAN (Q13822)	Ectonucleotide pyrophosphatase/phosphodiesterase 2	1	10
174	2.0	2.0	10.8	SPRL1_HUMAN (Q14515)	SPARC-like protein 1 precursor	1	31
175	2.0	2.0	15.2	OMD_HUMAN (Q99983)	Osteomodulin precursor	1	19
176	2.0	2.0	59.8	LV4C_HUMAN (P01717)	Ig lambda chain V-IV region Hil	1	38
177	2.0	2.0	19.2	PROZ_HUMAN (P22891)	Vitamin K-dependent protein Z precursor	1	11
178	2.0	2.0	33.3	IGF2_HUMAN (P01344)	Insulin-like growth factor II precursor	1	8
179	2.0	2.0	29.0	IBP1_HUMAN (P08833)	Insulin-like growth factor-binding protein 1 precursor	1	8
180	2.0	2.0	73.3	HV3R_HUMAN (P01779)	Ig heavy chain V-III region TUR	1	17
181	2.0	2.0	15.4	SODE_HUMAN (P08294)	Extracellular superoxide dismutase	1	8
182	2.0	2.0	57.4	KV1W_HUMAN (P04431)	Ig kappa chain V-I region Walker precursor	1	17
183	2.0	2.0	26.1	EPCR_HUMAN (Q9UNN8)	Endothelial protein C receptor precursor	1	7
184	2.0	2.0	46.2	HV3P_HUMAN (P01777)	Ig heavy chain V-III region TEI	1	8
185	2.0	2.0	25.4	FCN3_HUMAN (O75636)	Ficolin-3 precursor	1	5
186	2.0	2.0	33.6	CYTM_HUMAN (Q15828)	Cystatin M precursor	1	4
187	2.0	2.0	22.9	MYG_HUMAN (P02144)	Myoglobin	1	4
188	2.0	4.3	30.1	K22E_HUMAN	Keratin, type II cytoskeletal 2	1	26

				(P35908)	epidermal		
189	1.8	1.8	24.2	ALDOA_HUMAN (P04075)	Fructose-bisphosphate aldolase A	1	12
190	1.7	1.7	37.1	EMIL3_HUMAN (Q9NT22)	EMILIN-3 precursor	1	36
191	1.7	1.7	21.0	EGLN_HUMAN (P17813)	Endoglin precursor	1	14
192	1.5	1.5	20.7	LYAM1_HUMAN (P14151)	L-selectin precursor	1	10
193	1.5	1.5	18.8	PODXL_HUMAN (O00592)	Podocalyxin-like protein 1 precursor	1	10
194	1.5	1.5	33.3	HV1G_HUMAN (P23083)	Ig heavy chain V-I region V35 precursor	1	8
195	1.4	1.4	27.9	DAG1_HUMAN (Q14118)	Dystroglycan precursor	1	48
196	1.4	11.7	40.3	FHR1_HUMAN (Q03591)	Complement factor H-related protein 1 precursor	1	87
197	1.4	1.4	17.5	MUC18_HUMAN (P43121)	Cell surface glycoprotein MUC18 precursor	1	17
198	1.4	1.4	33.9	MIME_HUMAN (P20774)	Mimecan precursor	1	14
199	1.4	1.4	62.6	TAGL2_HUMAN (P37802)	Transgelin-2	1	27
200	1.4	1.4	16.5	PROC_HUMAN (P04070)	Vitamin K-dependent protein C precursor	1	39
201	1.3	1.3	22.1	FLNA_HUMAN (P21333)	Filamin-A	1	92
202	1.3	1.3	41.1	NGF_HUMAN (P01138)	Beta-nerve growth factor precursor	1	19
203	1.3	1.3	18.7	FBLN3_HUMAN (Q12805)	EGF-containing fibulin-like extracellular matrix protein 1 precursor	1	22
204	1.2	1.2	26.6	OXRP_HUMAN (Q9Y4L1)	150 kDa oxygen-regulated protein precursor	1	43
205	1.2	1.2	9.7	EXTL2_HUMAN (Q9UBQ6)	Exostosin-like 2	1	3
206	1.1	1.1	18.6	FETUB_HUMAN (Q9UGM5)	Fetuin-B precursor	1	11

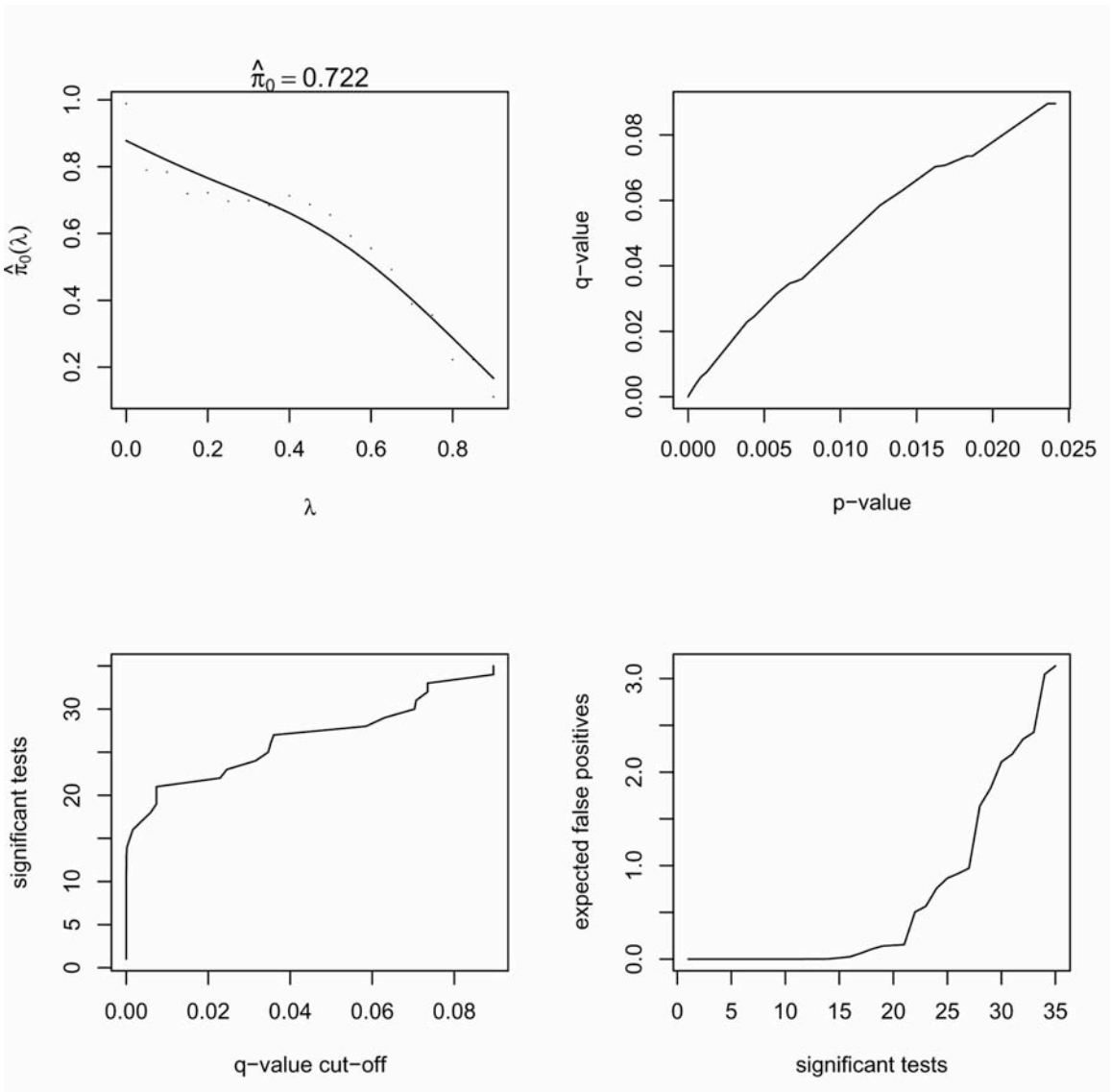
[a] Proteins initially labeled as "precursors" by ProteinPilot later were identified in Mascot searches as the active proteins.

[b] Peptides used in this score do not match any other protein identified.

[c] Total score includes peptides used in another protein identification.

[d] SwissProt Primary Accession number.

Supplemental Material, Figure 1. Graphical output from Q-value software showing comparisons of *p*- and *q*-values and the expected number of false positives for the entire dataset. Further information on the program and associated literature can be found at http://genomine.org/qvalue.



Supplemental Material, Table 2. Additional information on fetal proteins identified as being significantly increased or decreased in response to maternal smoking ($p<0.05$). Proteins were identified at the ≥99% confidence level using at least two peptide markers.

Protein Name	SwissProt ID	Protein ID Scores Unused[a]	Total[a]	Smoker/Non-smoker iTRAQ Ratio[b] Average	*p* value	*q* value
Adiponectin	Q15848	6.08	6.08	0.84	8.80×10^{-03}	4.10×10^{-03}
Alpha-2-macroglobulin	P01023	167.87	167.87	1.71	0	0
Alpha-fetoprotein	P02771	72.04	72.04	1.4	1.58×10^{-24}	5.74×10^{-24}
Antithrombin-III	P01008	35.92	35.92	0.87	1.20×10^{-07}	1.46×10^{-07}
Apolipoprotein A-I	P02647	16.22	16.22	1.71	6.48×10^{-35}	3.53×10^{-34}
Apolipoprotein A-IV	P06727	27.01	27.02	1.46	2.76×10^{-23}	7.51×10^{-23}
Complement C1r subcomponent	P00736	18.15	18.15	0.83	2.20×10^{-03}	1.40×10^{-03}
Complement C3	P01024	13.46	13.46	0.79	1.20×10^{-04}	9.80×10^{-05}
Complement C4-B	P0C0L5	9.5	9.5	0.64	7.90×10^{-03}	4.10×10^{-03}
Fibrinogen alpha chain	P02671	6.22	6.22	1.47	1.80×10^{-02}	7.50×10^{-03}
Hemoglobin alpha subunit	P69905	39.44	39.44	1.5	1.68×10^{-21}	3.66×10^{-21}
Hemoglobin gamma-1 subunit	P69891	3	20.7	1.77	6.12×10^{-05}	5.55×10^{-05}
Hemoglobin gamma-2 subunit	P69892	22.38	22.38	1.74	9.48×10^{-08}	1.29×10^{-07}
Hemopexin	P02790	49.27	49.27	0.83	6.92×10^{-14}	1.26×10^{-13}
Ig gamma-1 chain C region	P01857	22.97	22.97	1.32	5.56×10^{-09}	8.64×10^{-09}
Ig lambda chain C regions	P01842	4.1	4.1	1.25	7.50×10^{-03}	4.10×10^{-03}
Serum albumin	P02768	44.02	44.02	1.22	9.90×10^{-05}	8.30×10^{-05}

[a] Scores are computed as the sum of the log (confidence) for each peptide. Unused peptides are not matched to any other protein within the dataset; the total is a sum of used and unused peptides as described in the Protein Pilot User Guide.

[b] Additional information on protein identity and the 95% confidence interval can be found in Table 1.

Supplemental Material, Table 3. Additional Gene Ontology Information for the entire dataset. Data were generated using the GOSt gene group functional profiling tool (http://biit.cs.ut.ee/gprofiler/index.cgi) and sorted using Microsoft Excel.

Descriptor	p-value	term size (T)	Query size (Q)	nQ in T [a]	PPV [b]	Recall	GO ID	Domain
antioxidant activity	1.19E-06	46	235	6	0.026	0.13	16209	MF [c]
binding	1.34E-19	11111	235	151	0.643	0.014	5488	MF
enzyme regulator activity	2.77E-22	719	235	39	0.166	0.054	30234	MF
signal transducer activity	1.82E-06	2801	235	44	0.187	0.016	4871	MF
structural molecule activity	1.62E-07	729	235	21	0.089	0.029	5198	MF
transporter activity	1.35E-06	1282	235	27	0.115	0.021	5215	MF

Descriptor	p-value	term size (T)	Query size (Q)	nQ in T	PPV	Recall	GO ID	Domain
biological adhesion	5.98E-25	688	235	41	0.174	0.06	22610	BP
biological regulation	1.11E-09	4643	235	71	0.302	0.015	65007	BP
cellular process	3.45E-17	12495	235	157	0.668	0.013	9987	BP
developmental process	7.61E-18	3498	235	75	0.319	0.021	32502	BP
establishment of localization	1.45E-13	2795	235	59	0.251	0.021	51234	BP
immune system process	2.56E-29	1119	235	55	0.234	0.049	2376	BP
localization	8.16E-14	2840	235	60	0.255	0.021	51179	BP
locomotion	2.26E-08	421	235	17	0.072	0.04	40011	BP
metabolic process	1.33E-07	7980	235	96	0.409	0.012	8152	BP
multicellular organismal process	4.88E-32	3954	235	102	0.434	0.026	32501	BP
response to stimulus	5.41E-37	2895	235	94	0.4	0.032	50896	BP

[a] Number of queries matched in GO term

[b] PPV, Positive Predictive Value

[c] MF, Molecular Function

[d] BP, Biological Processes