

SUPPLEMENTAL FIGURE 1

Hierarchical clustering analysis of the multivariate data listed in table 2. Apparent tissue clusters are marked out. F=femoral head, H=humeral head and K=tibial knee were articular cartilages while the other cartilage types were from M=meniscus, AF= annulus fibrosus, NP=nucleus pulposus, R=rib and T=trachea.

SUPPLEMENTAL TABLE 1

List of all detected proteins in tissue extracts using the 2D-LCMS with ITRAQ quantification from eight human cartilage subtypes (n=5-6).

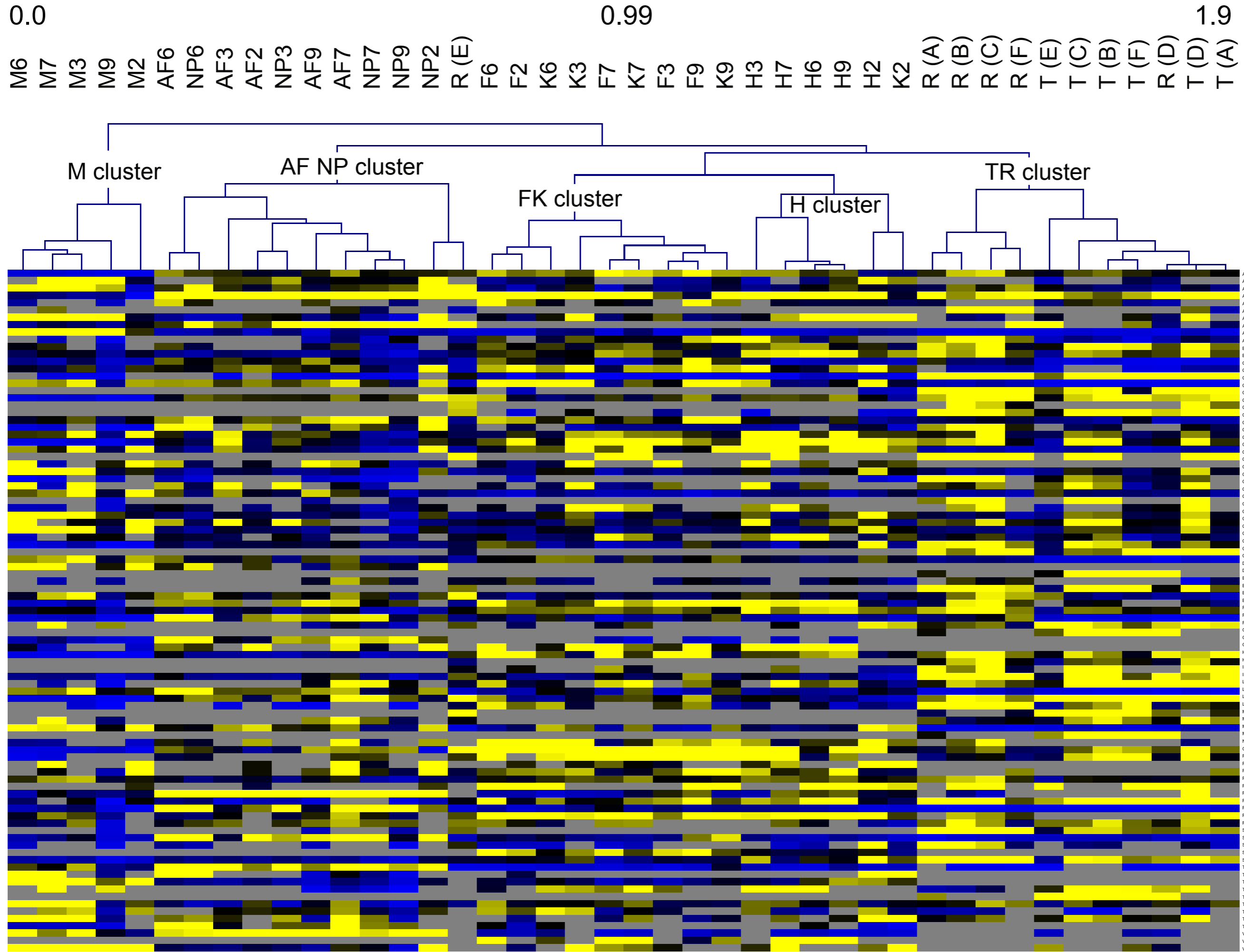
SUPPLEMENTAL TABLE 2

List of proteins omitted from the total list presented in supplemental table 1.

SUPPLEMENTAL TABLE 3A-3K

Significantly differentially abundant proteins ($P \leq 0.05$) using pairwise tissue comparisons of cartilage tissue extracts.

Supplemental Figure 1



Supplemental table 1

Protein name	Accession	F7	F6	F3	F9	F2	F-mean	H7	H6	H3	H9	H2	H-mean	K7	K6	K3	K9	K2	K-mean	M7	M6	M3	M9	M2	M-mean
14-3-3 protein eta	Q04917						ND						ND						ND						ND
14-3-3 protein gamma	P61981						ND						ND						ND	2.21	1.61				1.91
14-3-3 protein theta	P27348						ND						ND						ND						ND
14-3-3 protein zeta/delta	P63104						ND						ND						ND						ND
1-phosphatidylinositol-4,5-bisphosphate ph	P51178						ND						ND						ND						ND
40S ribosomal protein S20	P60866					1.45	1.45					2.00	2.00				1.30	1.30	1.30						ND
4-trimethylaminobutylaldehyde dehydrogen	P49189						ND						ND						ND						ND
78 kDa glucose-regulated protein	P11021						ND						ND						ND	1.55					1.55
Actin, alpha cardiac muscle 1	P68032						ND						ND						ND						ND
Actin, aortic smooth muscle	P62736	0.30		0.514	0.46	0.32	0.40	0.52		0.615	0.79	1.50	0.86	0.59		0.543	0.34	1.25	0.68						ND
Actin, cytoplasmic 1	P60709	0.34	0.44	0.532	0.48	0.33	0.42	0.54	0.65	0.494	0.81	1.50	0.80	0.62	0.48	0.538	0.36	1.29	0.66	2.13	1.55	0.763	0.79	0.54	1.15
Adenomatous polyposis coli protein 2	O95996	0.57	2.83				1.70	0.33	0.42				0.37	1.16	2.03				1.60			2.453		1.97	2.21
Adenylate kinase isoenzyme 1	P00568						ND						ND						ND						ND
Adenylyl cyclase-associated protein 1	Q01518						ND						ND						ND						ND
Adipocyte enhancer-binding protein 1	Q8IUX7					0.39	0.39					3.22	3.22					0.92	0.92						ND
Adseverin	Q9Y6U3						ND						ND						ND						ND
Aggrecan core protein	P16112	2.08	1.70	1.593	2.42	1.37	1.83	1.52	1.14	1.544	1.31	0.47	1.20	1.80	1.51	1.264	1.58	0.57	1.34	0.18	0.15	0.135	0.10	0.08	0.13
Alcohol dehydrogenase [NADP+]	P14550	0.00					0.00	2.20					2.20	2.87					2.87			3.591			3.59
Alcohol dehydrogenase 1B	P00325			1.477			1.48			0.935			0.94			2.096			2.10			6.55			6.55
Alpha-1-acid glycoprotein 1	P02763	0.53	0.95	0.517	1.25	1.37	0.92	2.15	3.54	0.560	4.48	5.09	3.17	1.83	1.90	1.795	4.01	4.11	2.73	5.39	5.40	4.885	9.01	2.41	5.42
Alpha-1-antichymotrypsin	P01011		0.40	0.383	0.45	0.65	0.47		0.54	0.289	1.14	1.87	0.96		0.56	0.906	0.84	1.47	0.95	2.40		2.109	2.19	0.78	1.87
Alpha-1-antitrypsin	P01009	0.21	0.58	0.457	0.53	0.27	0.41	0.59	0.95	0.435	1.22	0.87	0.81	0.73	0.72	1.077	0.78	0.77	0.81	1.94	1.88	2.014	1.67	0.22	1.55
Alpha-1B-glycoprotein	P04217					1.00	1.00					5.89	5.89					5.58	5.58				1.51	2.41	1.96
Alpha-2-HS-glycoprotein	P02765		0.91	1.041			0.97		1.78	1.143			1.46		1.50	1.821			1.66	2.96			1.40	0.48	1.61
Alpha-2-macroglobulin	P01023	0.10	0.16	0.110	0.06	0.12	0.11	0.13	0.14	0.123	0.11	0.17	0.13	0.13	0.20	0.257	0.07	0.16	0.16	0.22	0.12	0.507	0.13	0.10	0.22
Alpha-actinin-1	P12814						ND						ND						ND						ND
Alpha-crystallin B chain	P02511	0.64					0.64	0.73					0.73	0.82					0.82			1.672	2.13		1.90
Alpha-enolase	P06733	1.01	1.22	1.209	1.41	1.48	1.27	1.23	1.67	1.504	1.95	1.77	1.62	2.04	1.75	1.461	1.41	1.38	1.61	1.47	1.38	0.982	0.55	0.90	1.06
Angiogenin	P03950	2.01	6.10	1.339	0.74	3.27	2.69	2.56	3.95	2.561	3.25	2.61	2.98	3.01	2.57	2.226	2.70	0.83	2.26	0.53	0.59	0.405	0.45	0.04	0.40
Angiopoietin-related protein 2	Q9UKU9	0.98	2.13		3.15	1.44	1.93	0.81	0.73		0.76	0.78	0.77	0.84	0.90		1.43	0.65	0.95		0.39		0.23		0.31
Angiopoietin-related protein 7	O43827						ND						ND						ND	1.38					1.38
Annexin A1	P04083	0.83	1.61	1.224	1.19	0.68	1.11	1.57	2.29	1.664	2.06	1.20	1.76	1.54	1.23	1.228	1.22	1.19	1.28	2.05	1.89		2.03		1.99
Annexin A2	P07355			1.081	1.47	0.46	1.00			1.273	2.37	0.96	1.53			1.199	1.89	1.18	1.42	1.61	1.62		0.88		1.37
Annexin A5	P08758	0.51	0.54		0.74	0.54	0.58	0.49	0.86		1.17	0.98	0.87	1.13	1.26		0.74	0.66	0.95	1.60	0.57		0.48		0.88
Annexin A6	P08133	1.03					1.03	1.03					1.03	1.37					1.37	1.38			0.89		1.14
Antithrombin-III	P01008				0.90	0.75	0.82				2.49	2.19	2.34				1.76	1.85	1.80				3.96		3.96
Apolipoprotein A-I	P02647	0.55	0.89	1.318	0.52	0.53	0.76	1.64	2.27	0.907	1.98	3.48	2.06	1.00	1.05	3.155	0.66	3.81	1.93	3.26	2.64	4.412	1.89	0.80	2.60
Apolipoprotein D	P05090						ND						ND						ND	0.73	0.42	0.613	0.40	0.91	0.62
Argininosuccinate synthase	P00966						ND						ND						ND						ND
Asporin	Q9BXN1	0.14	0.15	0.114	0.20	0.15	0.15	0.15	0.21	0.145	0.26	0.43	0.24	0.58	0.50	0.542	0.72	0.37	0.54	3.99	3.28	5.025	1.97	1.15	3.08
ATP synthase subunit beta, mitochondrial	P06576						ND						ND						ND						ND
Augurin	Q9H1Z8	0.99	1.19	0.903	1.70		1.19	1.32	0.57	3.220	1.19		1.57	0.89	0.76	1.304	2.30		1.31	0.28			0.06		0.17
Bardet-Biedl syndrome 12 protein	Q6ZW61					0.33	0.33					1.54	1.54					0.73	0.73						ND
Basement membrane-specific heparan sulf	P98160	1.27	1.34	0.799	1.07	0.97	1.09	1.58	1.59	1.289	0.92	1.11	1.30	1.44	1.20	0.817	0.74	0.65	0.97	1.12	0.93		0.29		0.78
Beta-2-glycoprotein 1	P02749					0.30	0.30					7.17	7.17					4.71	4.71						ND
Beta-enolase	P13929	1.08				0.94	1.01	3.35				3.31	3.33	1.93				0.28	1.11						ND
Biglycan	P21810	1.63	1.14	1.252	0.80	1.23	1.21	1.85	2.04	1.816	1.86	1.18	1.75	1.50	0.92	0.988	0.72	1.57	1.14	0.92	0.65	0.876	0.39	0.83	0.73
Bone morphogenetic protein 3b	P55107		1.35		6.26		3.80		1.10		2.64		1.87		0.50		1.48		0.99						ND
Calmodulin	P62158						ND						ND						ND				3.07		3.07
Carbohydrate sulfotransferase 3	Q7LGC8						ND						ND						ND						ND
Carbonic anhydrase 1	P00915	0.79	1.15	1.103	0.80	0.41	0.85	2.50	0.74	0.594	3.92	0.63	1.68	4.52	1.08	2.150	0.42	0.40	1.71	3.74	2.65	2.885	0.17	0.35	1.96
Carbonic anhydrase 2	P00918	1.50					1.50	2.72					2.72	4.51					4.51	2.28					2.28
Carbonic anhydrase 3	P07451	0.63	2.45	0.832		1.34	1.31	3.88	3.59	2.475		6.10	4.01	4.43	0.39	0.618		0.43	1.47	3.77					3.77
Carbonyl reductase [NADPH] 3	O75828						ND						ND						ND						ND

<i>Cartilage intermediate layer protein 1</i>	O75339	0.20	1.41	0.915	2.22	1.06	1.16	0.21	0.27	0.645	0.41	0.38	0.38	0.30	0.79	0.949	1.14	0.24	0.68	0.30	0.48	0.684	0.20	0.28	0.39	
<i>Cartilage intermediate layer protein 2</i>	Q8IUJL	0.70	1.64	1.570	2.40	2.99	1.86	0.93	0.77	2.246	1.61	2.05	1.52	1.64	1.55	2.370	1.72	1.19	1.69	0.69	0.88	1.192	0.29	1.16	0.84	
<i>Cartilage matrix protein</i>	P21941	0.04	0.33	0.028	0.04	0.05	0.10	0.07	0.25	0.070	0.09	0.21	0.14	0.06	0.36	0.061	0.08	0.06	0.12	0.12		0.065	0.05		0.08	
<i>Cartilage oligomeric matrix protein</i>	P49747	0.44	2.41	0.957	2.84	1.88	1.70	0.54	0.49	1.732	0.96	2.38	1.22	1.32	2.79	2.525	2.68	0.79	2.02	1.50	1.64	1.852	0.43	1.59	1.40	
<i>Cathepsin D</i>	P07339						ND						ND						ND				0.75		0.75	
<i>Cathepsin G</i>	P08311						ND						ND						ND				0.96		0.96	
<i>C-C motif chemokine 21</i>	O00585					0.26	0.26					0.28	0.28					0.25	0.25						ND	
<i>CD44 antigen</i>	P16070						ND						ND						ND	1.69					1.69	
<i>CD9 antigen</i>	P21926						ND						ND						ND						ND	
<i>Ceruloplasmin</i>	P00450					0.20	0.20					2.01	2.01					1.61	1.61		1.89			0.47	1.18	
<i>Chondroadherin</i>	O15335	1.18	1.68	1.149	1.52	0.81	1.27	1.27	1.20	1.239	1.54	0.94	1.24	0.70	0.51	0.677	0.65	0.38	0.58	0.16	0.11	0.183	0.06	0.08	0.12	
<i>Chondroitin sulfate proteoglycan 4</i>	Q6UVK1						ND						ND						ND						ND	
<i>Chondromodulin-1</i>	O75829			0.433		0.14	0.29			0.099		0.15	0.12			0.000		0.17	0.09						ND	
<i>Chordin-like protein 2</i>	Q6WN34						ND						ND						ND			0.853			0.85	
<i>Clusterin</i>	P10909	1.01	1.75	0.993	2.55	1.63	1.59	0.84	0.67	1.020	1.12	0.39	0.81	1.29	1.06	1.518	2.11	0.50	1.29	1.01	0.81	1.296	0.59	0.96	0.93	
<i>Coagulation factor XIII A chain</i>	P00488		0.51	0.425			0.47		0.86	0.721			0.79		0.87	0.719			0.80		0.43		0.00		0.21	
<i>Cofilin-1</i>	P23528				0.85		0.85				1.54		1.54			1.22			1.22						ND	
<i>Coiled-coil domain-containing protein 80</i>	Q76M96	0.44		0.453	0.48	0.70	0.52	0.31		0.375	0.59	0.81	0.52	0.46		0.256	0.50	0.19	0.35	0.17	0.11		0.04	0.09	0.10	
<i>Collagen alpha-1(I) chain</i>	P02452	1.72	0.66	1.416	1.12	1.14	1.21	2.34	1.16	4.498	2.51	1.18	2.34	1.44	0.73	1.632	0.82	1.16	1.16	1.20	1.17	2.063	0.48	4.25	1.83	
<i>Collagen alpha-1(II) chain</i>	P02458	2.92	1.30	2.062	1.53	2.39	2.04	3.98	1.98	6.842	4.38	2.42	3.92	2.34	0.92	2.252	1.16	1.68	1.67	0.09	0.10	0.181	0.08	0.29	0.15	
<i>Collagen alpha-1(III) chain</i>	P02461	1.29	0.88	0.786	0.97	1.36	1.06	2.11	1.30	2.916	2.49	2.20	2.20	3.25	1.27	2.989	1.93	1.43	2.17	1.06	1.53	4.254	0.66	4.00	2.30	
<i>Collagen alpha-1(IX) chain</i>	P20849	3.96					3.96	6.76					6.76	4.21					4.21						ND	
<i>Collagen alpha-1(V) chain</i>	P20908		0.83	2.005		0.45	1.09		1.29	3.907		1.12	2.11		0.75	2.595		1.26	1.53	0.29	2.09		1.08	6.32	2.44	
<i>Collagen alpha-1(VI) chain</i>	P12109	0.28	0.54	0.426	0.63	0.46	0.47	0.44	0.67	1.038	0.98	1.79	0.98	0.65	1.02	1.028	0.77	0.94	0.88	2.76	3.36	2.815	0.75	1.09	2.15	
<i>Collagen alpha-1(X) chain</i>	Q03692					0.22	0.22					0.20	0.20					0.08	0.08	0.12	0.04		0.20		0.12	
<i>Collagen alpha-1(XI) chain</i>	P12107	0.46	0.80	1.380			0.88	0.47	1.29	3.527			1.76	0.57	0.67	2.176			1.14	0.26	2.00	2.403			1.55	
<i>Collagen alpha-1(XII) chain</i>	Q99715	1.92				1.38	1.65	2.83				2.40	2.62	1.26			2.15		1.71						ND	
<i>Collagen alpha-1(XXI) chain</i>	Q96P44						ND						ND						ND						ND	
<i>Collagen alpha-1(XXIII) chain</i>	Q86Y22		0.34				0.34		0.53				0.53		0.62				0.62		1.63				1.63	
<i>Collagen alpha-2(I) chain</i>	P08123	0.28	0.29	0.336	0.14	0.17	0.24	0.61	0.54	0.532	0.26	0.49	0.49	0.30	0.57	0.369	0.28	0.76	0.46	1.50	1.29	3.215	0.77	5.58	2.47	
<i>Collagen alpha-2(IX) chain</i>	Q14055						ND						ND						ND			0.16			0.16	
<i>Collagen alpha-2(V) chain</i>	P05997	2.38	0.90	0.765			1.35	2.87	1.26	1.514			1.88	1.67	0.62	2.633			1.64	0.28	0.26		0.17	0.74	0.36	
<i>Collagen alpha-2(VI) chain</i>	P12110	0.35	0.53	0.595	0.77	0.56	0.56	0.49	0.74	1.309	1.20	2.19	1.19	0.84	1.03	1.368	0.99	1.13	1.07	2.82	3.29	2.739	1.21	0.82	2.17	
<i>Collagen alpha-2(XI) chain</i>	P13942	0.60	0.92	1.178	0.85	0.84	0.88	0.71	1.20	2.001	1.52	1.11	1.31	0.75	0.54	1.247	0.80	0.46	0.76		2.00	0.000	0.82	5.69	2.13	
<i>Collagen alpha-3(IX) chain</i>	Q14050					0.72	0.72				0.56		0.56				0.26		0.26						ND	
<i>Collagen alpha-3(VI) chain</i>	P12111	0.36	0.53	0.478	0.59	0.47	0.48	0.47	0.64	0.900	1.03	1.84	0.97	0.64	0.91	0.872	0.71	0.97	0.82	2.33	3.10	2.741	0.62	2.08	2.17	
<i>Complement C1q subcomponent subunit A</i>	P02745	1.30	1.14				1.22	2.38	7.09				4.74	1.35	1.20				1.27						ND	
<i>Complement C1s subcomponent</i>	P09871						ND						ND						ND	0.95	0.75			0.27	0.66	
<i>Complement C3</i>	P01024	0.64		0.792	1.07	0.82	0.83	1.64		0.877	5.28	4.38	3.04	1.48		2.046	1.97	3.36	2.21	7.72				0.75	4.24	
<i>Complement C4-A</i>	P0C0L4					0.08	0.08					2.50	2.50					1.55	1.55		1.05				1.05	
<i>Complement factor B</i>	P00751					0.87	0.87					4.66	4.66					3.41	3.41			1.57			1.57	
<i>Complement factor D</i>	P00746	1.74	1.62	0.990			1.45	1.56	2.31	1.873			1.92	2.47	4.10	1.612			2.73		1.70	1.837			1.77	
<i>Complement factor H</i>	P08603			2.744		1.12	1.93			2.268		4.69	3.48			1.485		4.94	3.21					1.54	1.54	
<i>Complement factor H-related protein 1</i>	Q03591					1.12	1.12					4.69	4.69					4.94	4.94				1.54		1.54	
<i>Creatine kinase M-type</i>	P06732	0.72	2.97	1.440		1.49	1.65	3.35	7.28	4.726		6.69	5.51	2.73	0.80	1.379		0.47	1.34	5.04	0.46		0.18		1.89	
<i>C-type lectin domain family 11 member A</i>	Q9Y240	1.88	1.00	0.785		0.43	1.02	2.13	1.94	1.446		0.68	1.55	1.53	0.60	0.748		1.23	1.03		0.25	0.000	0.00		0.08	
<i>C-type lectin domain family 3 member A</i>	O75596	0.24	1.34	0.427	1.16	1.16	0.87	0.24	0.86	0.521	0.77	5.62	1.60	0.40	0.36	0.635	0.76	0.46	0.52	0.18	0.09	0.360	0.03	0.06	0.14	
<i>C-X-C motif chemokine 14</i>	O95715						ND						ND						ND						ND	
<i>Cystatin-B</i>	P04080						ND						ND						ND			1.949			1.95	
<i>Cystatin-C</i>	P01034						ND						ND						ND						ND	
<i>Cysteine-rich protein 2</i>	P52943						ND						ND						ND	1.32					1.32	
<i>Decorin</i>	P07585	0.59	0.97	0.690	0.98	1.00	0.85	0.73	0.53	0.838	0.66	1.32	0.82	1.20	1.44	1.409	1.35	0.82	1.24	1.63	1.48	2.314	0.76	1.64	1.56	
<i>Dermatopontin</i>	Q07507						ND						ND						ND		2.18	2.39		1.06	3.59	2.30
<i>Dextrin</i>	P60981						ND						ND						ND						ND	
<i>Dihydropyrimidinase-related protein 2</i>	Q16555					0.26	0.26					0.86	0.86					1.00	1.00		3.03				3.03	
<i>Dihydropyrimidinase-related protein 3</i>	Q14195						ND						ND						ND		3.05				3.05	
Protein name	Accesion	F7	F6	F3	F9	F2	F-mean	H7	H6	H3	H9	H2	H-mean	K7	K6	K3	K9	K2	K-mean	M7	M6	M3	M9	M2	M-mean	

Histone H2A type 1	P0C0S8	0.99	0.89	1.153	1.04	0.70	0.96	1.69	1.01	1.695	1.75	1.48	1.52	1.40	0.97	1.064	1.09	1.61	1.23	1.33	0.76	0.996	1.03	0.81	0.99	
Histone H2B type 1-B	P33778	0.97		0.805	0.93	0.60	0.83	1.33		1.321	1.60	1.27	1.38	1.19		0.820	0.88	1.67	1.14	2.09			1.50	1.00	1.53	
Histone H2B type 1-D	P58876	0.95	0.92	0.803	0.94		0.90	1.30	1.62	1.326	1.61		1.46	1.18	1.06	0.818	0.88		0.98	2.10			1.45		1.78	
Histone H2B type 1-K	O60814						ND						ND						ND			1.638			1.64	
Histone H2B type 2-E	Q16778						ND						ND						ND						ND	
Histone H3.2	Q71D13						ND						ND						ND						ND	
Histone H3.3	P84243					0.82	0.82					1.97	1.97					2.11	2.11						ND	
Histone H3-like	Q6NXT2	1.23	0.97	0.903			1.03	1.92	1.75	1.787			1.82	1.92	1.48	1.478			1.63	1.67	1.05	1.628	1.44		1.45	
Histone H4	P62805	1.05		1.222	1.54	0.98	1.20	1.51		1.263	1.40	1.55	1.43	1.50		0.921	1.09	1.49	1.25				0.59		0.59	
Histone-lysine N-methyltransferase MLL3	Q8NEZ4	1.09			1.49	1.64	1.41	0.98			1.73	1.53	1.41	1.78			1.42	1.22	1.27		1.11		0.56		0.83	
Homeobox protein Hox-D13	P35453						ND						ND						ND						ND	
Homeobox-containing protein 1	Q6NT76			0.837			0.84			1.577			1.58			0.523			0.52						ND	
Hyaluronan and proteoglycan link protein 1	P10915	2.08	2.29	1.957	2.66	2.42	2.28	1.21	1.55	1.197	1.73	0.61	1.26	1.15	1.30	0.665	0.65	0.90	0.93	0.07	0.10	0.085	0.02	0.04	0.06	
Hyaluronan and proteoglycan link protein 4	Q86UW8						ND						ND						ND			0.265			0.27	
Ig alpha-1 chain C region	P01876			1.886		0.47	1.18			0.999		2.16	1.58			3.724		2.09	2.91				1.28	1.17	1.22	
Ig gamma-1 chain C region	P01857	0.25	1.13	0.943	0.44	0.41	0.63	0.67	1.92	0.946	1.36	2.28	1.43	0.57	2.03	2.271	0.98	2.04	1.58	1.44	3.29	4.392	0.88	0.99	2.20	
Ig gamma-2 chain C region	P01859	0.18	1.19	0.646	0.47	0.66	0.63	0.44	2.28	0.477	1.36	2.34	1.38	0.37	1.86	1.661	0.89	1.99	1.35	1.33	3.32		0.45	1.01	1.53	
Ig gamma-3 chain C region	P01860			1.495		0.41	0.95			0.990		2.13	1.56			1.672		1.94	1.80		3.46	#####	0.93	1.19	4.52	
Ig gamma-4 chain C region	P01861						ND						ND						ND					0.76	0.76	
Ig heavy chain V-I region EU	P01742					0.23	0.23					1.44	1.44					1.41	1.41				0.64		0.64	
Ig heavy chain V-III region WEA	P01763						ND						ND						ND						ND	
Ig kappa chain C region	P01834	0.47	0.84	0.871	0.65	0.43	0.65	0.78	1.51	0.798	1.00	2.12	1.24	0.83	1.55	1.914	0.95	2.05	1.46	1.33	2.87	3.367	0.47	0.83	1.77	
Ig kappa chain V-III region SIE	P01620						ND						ND						ND						ND	
Ig lambda chain C regions	P01842	0.42	0.74	1.254	0.63	0.52	0.71	0.87	1.32	0.964	1.81	2.56	1.50	0.81	1.10	2.712	1.07	2.17	1.57		2.58	5.117	0.94	1.05	2.42	
Immunoglobulin superfamily containing leuc	O14498						ND						ND						ND						ND	
Inhibin beta A chain	P08476						ND						ND						ND		1.33		0.38		0.86	
Insulin-like growth factor-binding protein 7	Q16270						ND						ND						ND					0.18	0.18	
Inter-alpha-trypsin inhibitor heavy chain H1	P19827						ND						ND						ND			5.679			5.68	
Inter-alpha-trypsin inhibitor heavy chain H5	Q6UXX5	1.60				1.02	1.31	1.36			0.41		0.88	0.84			0.39	0.61	0.61						ND	
Isocitrate dehydrogenase [NADP] cytoplasmic	O75874						ND						ND						ND						ND	
Keratin, type II cytoskeletal 1	P04264	1.62					1.62	3.10					3.10	2.05				2.05	2.05						ND	
Kinesin heavy chain isoform 5A	Q12840			0.891			0.89			1.403			1.40			1.263			1.26						ND	
Lactadherin	Q08431	0.94	0.88	0.831	1.56	0.42	0.92	0.61	0.42	0.920	0.74	0.28	0.59	0.62	0.40	0.478	0.58	0.19	0.45	0.49	0.46	0.478	0.12	0.29	0.37	
Lactotransferrin	Q02788						ND						ND						ND				0.28		0.28	
Lambda-crystallin homolog	Q9Y2S2						ND						ND						ND						ND	
Lamin-A/C	P02545	0.58	0.43		0.36	0.48	0.46	0.84	1.20		1.14	1.63	1.20	0.98	0.70		0.57	1.96	1.05	3.92	3.66	1.293	2.04		2.73	
Leucine-rich alpha-2-glycoprotein	P02750						ND						ND						ND				3.07		3.07	
Leukocyte cell-derived chemotaxin-2	O14960	1.75	1.73		1.43	0.75	1.42	2.32	1.26		1.53	0.75	1.46	2.32	0.92		0.91	0.41	1.14	0.34			0.07		0.20	
Leukocyte elastase	P08246						ND						ND						ND		0.91			0.66	0.78	
L-lactate dehydrogenase A chain	P00338	1.11	1.71	1.118	2.10	2.95	1.80	1.09	1.66	1.419	3.63	3.60	2.28	1.86	1.36	1.314	2.11	2.06	1.74	2.14	1.90		0.36		1.47	
L-lactate dehydrogenase B chain	P07195						ND						ND						ND							ND
Lubricin (proteoglycan 4)	Q92954	0.96	0.40	0.600	0.40	0.18	0.51	0.43	0.37	0.477	0.26	0.13	0.33	0.39	0.26	0.483	0.48	0.18	0.36	0.45	0.29	0.633	0.14	0.08	0.32	
Lumican	P51884	0.31	0.45	0.188	0.36	0.31	0.32	0.52	0.43	0.368	0.35	0.91	0.51	1.31	1.00	0.830	1.21	0.70	1.01	1.41	1.48	2.452	0.92	1.10	1.47	
Lysozyme C	P61626	1.20	1.55	0.995	1.65	0.49	1.18	1.02	0.49	0.999	0.63	0.26	0.68	1.24	0.37	0.824	0.68	0.18	0.66	0.14	0.13	0.163	0.05	0.08	0.11	
Malate dehydrogenase, cytoplasmic	P40925						ND						ND						ND						ND	
Malate dehydrogenase, mitochondrial	P40926						ND						ND						ND				1.18		1.18	
Matrilin-3	O15232		1.85	1.140	1.49	1.36	1.46		0.85	0.540	0.21	0.55	0.54		1.64	0.783	0.32	0.33	0.77			0.167	0.03		0.10	
Matrix Gla protein	P08493						ND						ND						ND						ND	
Melanoma-derived growth regulatory protei	Q16674						ND						ND						ND						ND	
Melanotransferrin	P08582						ND						ND						ND			0.25			0.25	
Microfibril-associated glycoprotein 4	P55083						ND						ND						ND		2.52			0.54	1.53	
Mimectan	P20774	0.36	0.37	0.253	0.22	0.62	0.37	0.49	0.59	0.682	0.71	2.79	1.05	1.42	1.66	1.344	1.45	1.75	1.52	1.83	2.24	3.606	0.96	3.10	2.35	
Mitofusin-1	Q8IWA4						ND						ND						ND			0.19			0.19	
Moesin	P26038			1.464	1.39	0.92	1.26			1.956	1.84	1.91	1.90			1.401	1.03	1.37	1.27		1.76		0.57		1.17	
Myeloblastin	P24158						ND						ND						ND						1.76	
Myocilin	Q99972						ND						ND						ND		6.05			0.92	3.49	
Protein name	Accesion	F7	F6	F3	F9	F2	F-mean	H7	H6	H3	H9	H2	H-mean	K7	K6	K3	K9	K2	K-mean	M7	M6	M3	M9	M2	M-mean	

Myoglobin	P02144	0.40		0.954		2.13	1.16	2.36		2.663		11.90	5.64	1.38		0.677		0.41	0.82						ND		
Myosin light polypeptide 6	P60660						ND						ND						ND							ND	
Myosin-2	Q9UKX2						ND						ND						ND							ND	
Myosin-7	P12883						ND						ND						ND							ND	
Nesprin-2	Q8WXH0						ND						ND						ND					1.23		1.23	
Neuroblast differentiation-associated protein	Q09666	0.82	0.99	0.516			0.77	1.40	1.13	1.356			1.30	1.12	0.95	1.179			1.08	3.91			2.74			3.33	
Neuron navigator 3	Q8IVL0	0.25			0.00	0.41	0.22	0.63			0.30	0.80	0.58	1.05		0.71	0.80		0.85	1.07	1.29		1.01			1.12	
Nidogen-2	Q14112						ND						ND						ND							ND	
Nucleoside diphosphate kinase A	P15531						ND						ND						ND							ND	
Nucleoside diphosphate kinase B	P22392						ND						ND						ND							ND	
Osteomodulin	Q99983	0.57	2.01	1.762	1.58	2.17	1.62	0.70	1.17	1.582	1.16	3.07	1.53	1.11	2.01	1.990	1.87	1.38	1.67	0.41	0.45			0.22		0.36	
Peptidyl-prolyl cis-trans isomerase A	P62937	1.00	1.18		0.84	0.99	1.00	1.44	1.30		1.63	2.19	1.64	1.33	1.02		0.82	1.66	1.21	2.11	1.29		0.61	0.42		1.10	
Peptidyl-prolyl cis-trans isomerase B	P23284	0.65	1.19	0.798		0.80	0.86	0.82	1.00	0.688		1.50	1.00	0.92	0.84	0.609		1.06	0.86		1.12					1.12	
Peptidyl-prolyl cis-trans isomerase C	P45877				1.75		1.75				0.94		0.94			0.71			0.71				0.19			0.19	
Peroxiredoxin-1	Q06830		1.41	1.118	1.26	0.75	1.13		1.43	1.411	1.72	1.02	1.40		1.34	1.118	1.25	0.90	1.15	1.49	0.76	1.658	0.58			1.12	
Peroxiredoxin-2	P32119	0.72	0.99	1.559	1.09	0.61	0.99	2.15	1.50	1.269	2.83	1.18	1.79	2.36	1.09	2.265	0.84	1.10	1.53	2.87	2.04	1.933	0.38	0.74		1.59	
Peroxiredoxin-4	Q13162					0.84	0.84					1.75	1.15				1.22		1.22							ND	
Peroxiredoxin-5, mitochondrial	P30044					1.77	1.77					4.58	4.58				3.41		3.41							ND	
Peroxiredoxin-6	P30041	1.14				0.87	1.00	1.76				1.60	1.68	2.50				0.86	1.68							ND	
Phosphatidylethanolamine-binding protein	P30086	0.94			0.76	0.68	0.79	1.29			1.58	1.40	1.42	1.17		0.72	0.79		0.89							ND	
Phosphoglycerate kinase 1	P00558	1.11	1.69	1.532	1.61	1.49	1.48	1.46	2.03	1.600	2.04	1.60	1.74	2.48	1.76	1.559	1.38	1.21	1.68	1.42	1.43		0.59			1.15	
Phosphoglycerate mutase 1	P18669	1.11	1.88	1.179	1.71		1.47	1.55	1.80	0.902	1.90		1.54	2.04	1.70	0.666	1.17		1.39							ND	
Phosphoglycerate mutase 2	P15259						ND						ND						ND							2.10	2.10
Phospholipase A2, membrane associated	P14555	8.21	3.86	5.303	13.51	3.21	6.82	3.47	1.02	3.650	2.98	1.93	2.61	7.72	2.99	4.208	9.02	0.91	4.97	0.14	0.12	0.162	0.22	0.06		0.14	
Pigment epithelium-derived factor	P36955	1.04	1.06	0.000	0.59	0.69	0.68	1.72	1.68	1.463	1.33	3.54	1.94	1.46	1.36	1.379	0.88	3.39	1.69	1.99						1.99	
Plasma protease C1 inhibitor	P05155						ND						ND						ND		2.03	1.05		0.49	0.53		1.03
Plasma serine protease inhibitor	P05154						ND						ND						ND		0.52	0.53		0.12	0.37		0.39
Plasminogen activator inhibitor 1	P05121						ND						ND						ND			0.39		0.00			0.20
Plasminogen	P00747					0.23	0.23					4.28	4.28				6.64		6.64				2.95	1.53			2.24
Pleckstrin homology domain-containing family	Q9Y2H5	7.05	3.05	3.981	7.80		5.47	2.78	0.66	3.033	1.49		1.99	5.81	1.85	3.372	5.23		4.06	0.13	0.08					0.10	
Pleiotrophin	P21246						ND						ND						ND								ND
Plexin domain-containing protein 2	Q6UX71						ND						ND						ND		0.53		0.25				0.39
Polymerase I and transcript release factor	Q6NZI2			0.654		4.23	2.44			1.100		1.11	1.10			0.988		1.01	1.00	1.67			1.61			1.64	
Probable serine protease HTRA3	P83110						ND						ND						ND				0.47				0.47
Procollagen C-endopeptidase enhancer 1	Q15113	1.34		0.838		1.10	1.09	1.65		1.117		3.25	2.00	0.00		1.049		2.43	1.16	3.80				4.24		4.02	
Procollagen C-endopeptidase enhancer 2	Q9UKZ9	0.71	1.27	1.296	2.28	1.49	1.41	1.08	1.21	1.732	2.32	0.74	1.42	0.88	1.53	1.687	3.02	0.67	1.56	0.99			0.28	4.24		1.84	
Profilin-1	P07737						ND						ND						ND								ND
Prolargin	P51888	1.22	1.03	0.986	0.94	0.87	1.01	1.36	1.21	1.422	1.41	0.96	1.27	1.49	1.14	1.286	1.06	1.08	1.21	1.57	1.13	1.679	0.77	1.06		1.24	
Protein disulfide-isomerase A3	P30101		1.36				1.36		2.41				2.41		1.55				1.55				1.68				1.68
Protein disulfide-isomerase	P07237	1.06	1.07	1.632	1.59	1.25	1.32	1.01	1.32	1.119	1.04	3.21	1.54	1.50	1.21	0.891	1.24	1.51	1.27	1.57	1.22		1.04	0.00		0.96	
Protein FAM59B	Q75VX8					1.20	1.20					1.32	1.32				1.19		1.19								ND
Protein piccolo	Q9Y6V0						ND						ND						ND								ND
Protein S100-A1	P23297		5.23		2.64	2.81	3.56		4.49		4.56	2.05	3.70		3.38		2.49	1.79	2.55					1.11		1.11	
Protein S100-A4	P26447					0.39	0.39					2.79	2.19				1.54		1.54		2.01		1.73			1.87	
Protein S100-A6	P06703					0.78	0.78					1.81	1.81				1.69		1.69								ND
Protein S100-A8	P05109						ND						ND						ND								ND
Protein S100-A9	P06702	0.29	0.35	1.096	1.37	0.31	0.68	1.39	1.20	0.310	1.34	0.77	1.00	0.74	0.17	0.256	0.36	0.87	0.48	0.97	0.30	0.575	0.49	0.72		0.61	
Protein S100-B	P04271	1.01	2.29	1.569	2.21	0.86	1.59	1.47	3.06	1.654	4.48	0.86	2.31	1.46	1.51	0.944	1.23	0.63	1.15	0.62	0.000	0.04	0.00			0.16	
Protein transport protein Sec16B	Q96JE7				1.53	2.50	2.02				3.61	2.20	2.91				0.97	1.34	1.16							ND	
Prothrombin	P00734					0.82	0.82					3.26	3.26				4.13		4.13								ND
Putative annexin A2-like protein	A6NMY6		0.98				0.98		1.85				1.85		1.37				1.37								ND
Putative elongation factor 1-alpha-like 3	Q5VTE0	0.71	1.19		2.62	0.62	1.28	1.44	2.00		1.29	2.04	1.69	1.27	1.57		1.33	1.22	1.35		0.98					0.98	
Putative endoplasmic reticulum protein	Q58FF3						ND						ND						ND								ND
Putative V-set and immunoglobulin domain	A6NJS3				0.19		0.19				1.23		1.23				0.89		0.89			3.103					3.10
Pyruvate kinase isozymes M1/M2	P14618	0.76	1.31	1.015	1.30	0.89	1.06	0.94	1.68	1.199	1.64	1.16	1.32	1.32	1.45	1.130	1.24	0.98	1.22	1.19	1.10	0.804	0.44	0.65		0.84	
Quinone oxidoreductase	Q08257	1.33					1.33	0.86					0.86						1.36								ND
Protein name	Accession	F7	F6	F3	F9	F2	F-mean	H7	H6	H3	H9	H2	H-mean	K7	K6	K3	K9	K2	K-mean	M7	M6	M3	M9	M2	M-mean		

<i>Versican core protein</i>	P13611	0.15	0.34	0.22	0.27	0.24	0.19	0.27	0.14	0.20	0.20	0.20	0.52	0.39	0.16	0.32	1.45	2.56	2.082	0.88	0.50	1.49			
<i>Vimentin</i>	P08670	0.47	0.62	0.469	0.45	0.31	0.46	0.80	0.98	0.913	0.92	1.18	0.96	1.10	1.09	0.943	0.82	1.19	1.03	2.23	2.15	1.686	1.17	0.90	1.63
<i>Vitamin D-binding protein</i>	P02774					1.30	1.30				3.51	3.51				3.92	3.92	12.87		4.31	1.89	6.35			
<i>Vitrin</i>	Q6UXI7	6.68	2.24		0.73	3.22	3.22	12.13	10.39		11.54	11.35	2.60	1.21		1.51	1.77					ND			
<i>Vitronectin</i>	P04004	1.53		1.033		0.59	1.05	2.15		1.136		1.55	1.40		2.345	2.84	2.19	5.67	2.72	7.664	2.38	1.90	4.07		
<i>Zinc-alpha-2-glycoprotein</i>	P25311						ND					ND					ND					2.90			
Protein name	Accession	F7	F6	F3	F9	F2	F-mean	H7	H6	H3	H9	H2	H-mean	K7	K6	K3	K9	K2	K-mean	M7	M6	M3	M9	M2	M-mean

Supplemental table 1 continued

Protein name	Accession	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T (A)	T (B)	T (C)	T (D)	T (E)	T (F)	T-mean	
14-3-3 protein eta	Q04917						ND						ND	1.44						1.44			2.92	2.99				2.96
14-3-3 protein gamma	P61981	0.93	0.65				0.79	0.52	0.68				0.60							ND								ND
14-3-3 protein theta	P27348						ND						ND				1.27			1.27					0.52	1.21		0.86
14-3-3 protein zeta/delta	P63104						ND						ND				1.26			1.26					0.50	1.18		0.84
1-phosphatidylinositol-4,5-bisphosphate phosphatase 2	P51178						ND						ND	1.42			3.14	1.65	1.23	1.86		4.07	3.27	3.12	1.41	2.24		2.82
40S ribosomal protein S20	P60866						ND						ND							ND								ND
4-trimethylaminobutylaldehyde dehydrogenase	P49189						ND						ND		1.00	1.37				1.18	4.66							4.66
78 kDa glucose-regulated protein	P11021	1.56					1.56	1.63					1.63		0.84	0.94				0.89	2.65							2.65
Actin, alpha cardiac muscle 1	P68032						ND						ND				2.27	1.66	0.87	1.60			2.48	3.22	2.60		2.77	
Actin, aortic smooth muscle	P62736						ND						ND							ND								ND
Actin, cytoplasmic 1	P60709	0.97	0.58	0.592	0.38	1.24	0.75	0.85	0.83	0.616	0.51	1.57	0.87	1.63	1.03	1.24	2.24	1.72	0.84	1.45	4.59	3.03	3.14	2.40	3.18	2.63		3.16
Adenomatous polyposis coli protein 2	O95996			1.230		1.22	1.23			0.936		1.80	1.37							ND								ND
Adenylate kinase isoenzyme 1	P00568						ND						ND	4.81						4.81		9.04	9.22					9.13
Adenylyl cyclase-associated protein 1	Q01518						ND						ND		1.47	1.42				1.44	2.79							2.79
Adipocyte enhancer-binding protein 1	Q8IUX7						ND						ND							ND								ND
Adseverin	Q9Y6U3						ND						ND	1.22			4.56			2.89		5.51	5.05		1.04	4.17		3.94
Aggrecan core protein	P16112	1.55	1.50	1.119	1.08	0.84	1.22	1.01	1.19	0.773	1.08	1.10	1.03	1.12	1.70	1.80	0.91	1.16	1.10	1.30	1.16	1.40	1.26	1.00	0.88	1.11		1.14
Alcohol dehydrogenase [NADP+]	P14550			1.651			1.65			1.053			1.05	0.84	0.56	0.65	1.76	1.10	0.96	0.98	1.21	1.62	1.46	1.94	1.08	2.24		1.59
Alcohol dehydrogenase 1B	P00325		0.56				0.56		0.34				0.34				2.26			2.26				1.18	1.69			1.44
Alpha-1-acid glycoprotein 1	P02763	1.03	0.91	0.840	1.39	1.81	1.19	0.82	0.61	0.940	0.88	7.57	2.16	0.52	0.60	0.42	0.36	0.59	0.49	0.50	0.83	0.81	0.65	0.54	0.57	0.36		0.63
Alpha-1-antichymotrypsin	P01011	0.98		1.203	0.88	1.22	1.07	0.95		1.609	0.91	10.21	3.42				0.57			0.57					0.25	0.72		0.48
Alpha-1-antitrypsin	P01009	1.11	1.17	1.136	0.74	0.81	0.99	1.21	2.11	1.289	1.34	5.29	2.25	0.69	1.41	1.05	0.39	3.32	1.59	1.41	0.82	0.52	0.68	0.49	0.96	0.54		0.67
Alpha-1B-glycoprotein	P04217				0.84	1.81	1.32				0.70	7.57	4.14							ND								ND
Alpha-2-HS-glycoprotein	P02765	1.16			0.40	2.03	1.19	0.60			0.24	8.09	2.98							ND								ND
Alpha-2-macroglobulin	P01023	0.50	0.26	0.259	0.13	0.25	0.28	0.81	0.65	0.658	0.20	0.81	0.62	3.01	3.01	6.07	0.82	3.78	2.98	3.28	1.57	2.81	2.47	1.00	2.70	2.17		2.12
Alpha-actinin-1	P12814						ND						ND	1.71	0.89	1.43	2.75			1.70	4.47	4.92	4.49		0.00	1.44		3.06
Alpha-crystallin B chain	P02511			0.568	0.66		0.61			0.466	0.33		0.40							ND								ND
Alpha-enolase	P06733	1.02	0.94	0.694	0.57	0.82	0.81	0.60	0.76	1.055	0.30	1.04	0.75	1.41	0.96	1.52	1.74	0.65	0.83	1.19	2.69	2.38	2.30	1.84	0.78	1.85		1.97
Angiogenin	P03950	3.68	3.41	2.528	6.08	2.53	3.65	4.08	2.88	2.477	5.24	2.28	3.39	3.97	1.50	1.86	3.17	4.89	2.38	2.96	2.66	1.29	1.52	3.60	2.58	1.63		2.21
Angiopoietin-related protein 2	Q9UKU9		1.77		1.18		1.47		1.07		0.53		0.80	0.72			0.32			0.52		1.21	1.09		0.47	0.45		0.81
Angiopoietin-related protein 7	O43827	1.11					1.11	0.64					0.64		3.37	4.82		0.31	1.95	2.61	1.36			0.32				0.84
Annexin A1	P04083	1.15	0.70		0.46		0.77	0.71	0.71		0.28		0.57	0.83	1.16	1.46	1.30	0.30	0.44	0.92	2.32	2.81	2.46	1.41	1.19	1.92		2.02
Annexin A2	P07355	0.89	0.65		0.46		0.67	0.57	0.56		0.32		0.48	0.65	1.04	1.41	1.71			1.20	2.92	2.07	2.23		1.23	1.55		2.00
Annexin A5	P08758	0.67	0.28		0.39		0.45	0.43	0.36		0.34		0.38	0.88	0.78	1.17	1.96	0.89	1.03	1.12	4.22	4.14	3.83	2.48	0.64	3.73		3.17
Annexin A6	P08133	1.02			0.54		0.78	0.43			0.40		0.42	0.96	1.09	1.35	3.08	0.70	0.71	1.32	4.61	3.68	4.02	2.63	1.59	2.72		3.21
Antithrombin-III	P01008				1.14		1.14				0.38		0.38							ND								ND
Apolipoprotein A-I	P02647	0.81	0.42	0.245	0.47	1.06	0.60	0.36	0.25	0.000	0.13	5.93	1.33		0.60	0.51	0.59			0.57	2.19				0.85	1.05		1.36
Apolipoprotein D	P05090	4.65	1.17	1.429	2.57	1.24	2.21	6.66	2.76	2.289	4.64	18.60	6.99				0.51	6.98	3.11	3.53				0.64	3.58	1.45		1.89
Argininosuccinate synthase	P00966						ND						ND	0.69						0.69		3.05	3.37					3.21
Asporin	Q9BXN1	0.56	0.27	0.586	0.18	0.21	0.36	0.44	0.30	0.547	0.27	0.36	0.38	0.13	0.12	0.15	0.10	0.16	0.11	0.13	0.26	0.13	0.18	0.11	0.14	0.15		0.16
ATP synthase subunit beta, mitochondrial	P06576						ND						ND		0.89	0.83	1.23			0.98	3.71				1.36	1.47		2.18
Augurin	Q9H1Z8	0.62			0.29		0.45	0.23			0.00		0.12	1.59	3.09	2.29	0.31	0.44	1.40	1.52	0.73	0.34	0.50	0.49	0.25	0.12		0.41
Bardet-Biedl syndrome 12 protein	Q6ZWE1						ND						ND							ND								ND
Basement membrane-specific heparan sulfatase	P98160	1.19	1.23		0.78		1.07	0.31	0.72		0.29		0.44	1.84	1.58	1.99	1.26	0.85	0.86	1.39	2.31	2.72	2.40	1.38	1.02	1.84		1.94
Beta-2-glycoprotein 1	P02749						ND						ND							ND								ND
Beta-enolase	P13929						ND						ND							ND								ND
Biglycan	P21810	0.59	0.46	0.623	0.38	0.52	0.52	0.26	0.34	0.430	0.15	0.44	0.33	1.84	1.56	2.16	1.23	0.67	1.22	1.44	1.83	1.54	1.63	1.24	0.40	1.12		1.29
Bone morphogenetic protein 3b	P55107						ND						ND							ND								ND
Calmodulin	P62158				0.92		0.92				0.84		0.84					1.47	1.55	1.51			5.06					5.06
Carbohydrate sulfotransferase 3	Q7LGC8						ND						ND		2.41	2.16				2.28	0.33							0.33
Carbonic anhydrase 1	P00915	0.97	0.77	1.048	0.21	1.42	0.88	0.98	0.95	1.336	0.34	4.35	1.59	0.42	0.44	0.45	0.53	0.42	0.27	0.42	0.92	1.42	2.03	0.65	1.42	0.34		1.13
Carbonic anhydrase 2	P00918	1.29					1.29	1.03					1.03							ND								ND
Carbonic anhydrase 3	P07451	0.50																										

<i>Cartilage intermediate layer protein 1</i>	O75339	0.97	1.35	1.184	1.54	0.94	1.20	0.46	0.95	1.061	0.43	0.62	0.70	1.14	0.56	0.52	0.07	0.28	0.76	0.55	0.12	0.16	0.12	0.10	0.17	0.08	0.13	
<i>Cartilage intermediate layer protein 2</i>	Q8IUL8	1.51	1.03	1.282	1.04	1.51	1.27	0.73	0.91	1.201	0.39	2.40	1.13		0.33	0.33	0.10	0.28	0.38	0.29	0.37			0.40	0.15	0.12	0.26	
<i>Cartilage matrix protein</i>	P21941	0.16		0.056	0.09		0.10	0.10		0.043	0.06		0.07	4.14	3.42	6.31	3.23	1.03	7.60	4.29	7.11	3.68	8.50	4.96	1.36	7.30	5.48	
<i>Cartilage oligomeric matrix protein</i>	P49747	1.82	1.53	1.166	1.46	1.47	1.49	1.10	1.56	1.187	0.54	1.79	1.23	0.31	0.28	0.38	0.07	0.25	0.29	0.26	0.09	0.08	0.08	0.07	0.07	0.07	0.08	
<i>Cathepsin D</i>	P07339				0.64		0.64				0.46		0.46								ND						ND	
<i>Cathepsin G</i>	P08311				1.62		1.62				2.89		2.89								ND						ND	
<i>C-C motif chemokine 21</i>	O00585						ND						ND	4.51	2.96	2.60	3.56	0.97	2.40	2.83	4.75	2.89	1.86	2.15	1.28	0.80	2.29	
<i>CD44 antigen</i>	P16070	1.19					1.19	0.00					0.00							ND	ND						ND	
<i>CD9 antigen</i>	P21926						ND						ND				2.41			2.41				0.51	0.58	0.55	ND	
<i>Ceruloplasmin</i>	P00450		1.25			1.32	1.28		3.45			6.53	4.99							ND	ND						ND	
<i>Chondroaderin</i>	O15335	1.46	0.86	1.215	1.06	1.11	1.14	1.02	1.35	1.091	1.20	1.88	1.31	1.65	2.30	2.39	1.67	1.78	1.92	1.95	1.77	2.83	1.73	1.88	0.93	1.94	1.85	
<i>Chondroitin sulfate proteoglycan 4</i>	Q6UVK1						ND						ND		2.35	1.73		1.73	0.96	1.69	1.90		1.40			1.65	1.65	
<i>Chondromodulin-1</i>	O75889						ND						ND	2.04	3.58	4.26	1.73	1.68	1.53	2.47	3.51	3.16	4.27	2.51	0.97	2.50	2.82	
<i>Chordin-like protein 2</i>	Q6WN34			2.145			2.15		1.444				1.44							ND	ND						ND	
<i>Clusterin</i>	P10909	2.82	1.54	0.917	1.71	1.35	1.67	2.15	1.86	1.283	0.85	3.14	1.85	0.67	0.75	0.89	0.24	0.47	0.76	0.63	0.32	0.37	0.48	0.33	0.55	0.87	0.49	
<i>Coagulation factor XIII A chain</i>	P00488		0.91			1.22	1.06		1.19			2.46	1.83	1.20	1.36	1.58	2.98	0.62	0.92	1.44	2.11	3.08	1.96	2.74	1.43	3.67	2.50	
<i>Cofilin-1</i>	P23528						ND						ND							ND	ND						ND	
<i>Coiled-coil domain-containing protein 80</i>	Q76M96	1.56	2.01		0.72	1.68	1.49	1.19	3.01		0.57	2.35	1.78	1.55	2.77	2.95		0.65	1.08	1.80	0.92	0.80	0.66	0.67			0.76	
<i>Collagen alpha-1(I) chain</i>	P02452	0.84	1.10	1.843	1.25	0.67	1.14	0.38	0.52	1.181	0.29	0.96	0.67	1.03	1.14	2.25	0.79	0.68	0.71	1.10	1.48	1.36	1.50	0.78	0.66	0.57	1.06	
<i>Collagen alpha-1(II) chain</i>	P02458	0.75	0.92	1.895	0.89	0.61	1.01	0.42	0.66	1.299	0.55	1.17	0.82	1.50	1.77	3.35	1.02	0.84	0.93	1.57	2.19	2.12	2.22	1.14	0.30	0.78	1.46	
<i>Collagen alpha-1(III) chain</i>	P02461	0.57	0.66	1.587	0.64	0.64	0.82	0.26	0.38	0.897	0.18	2.54	0.85	0.37	0.27	0.39	0.26	0.36	0.24	0.31	0.44	0.28	0.42	0.31	0.32	0.18	0.32	
<i>Collagen alpha-1(IX) chain</i>	P20849						ND						ND	2.27	2.92	4.68		2.87	6.57	3.86	2.66	2.94	2.96	3.91			3.12	
<i>Collagen alpha-1(V) chain</i>	P20908	1.72	1.66		2.47	0.89	1.69	0.00	0.66		0.31	0.49	0.37	0.67	0.34	0.49	0.85	0.35	0.27	0.49	1.78	0.87	1.12	0.85	0.45	0.55	0.94	
<i>Collagen alpha-1(VI) chain</i>	P12109	0.63	0.54	0.713	0.45	0.77	0.62	0.20	0.29	0.445	0.18	1.35	0.49	4.91	6.90	2.54	0.75			3.78	1.32	1.41	1.61		0.95	0.65	1.19	
<i>Collagen alpha-1(X) chain</i>	Q03692	0.16	0.33	0.23			0.24	0.09	0.15		0.08		1.03	1.22	1.03	1.52	0.77			1.14	2.01	1.54	2.15		1.30	0.34	1.47	
<i>Collagen alpha-1(XI) chain</i>	P12107	0.91	1.64	2.173			1.58	0.32	0.68	2.085			ND							ND	ND						ND	
<i>Collagen alpha-1(XII) chain</i>	Q99715						ND						ND					0.47	0.00	0.24			0.51				0.51	
<i>Collagen alpha-1(XXI) chain</i>	Q96P44						ND						1.71							ND							ND	
<i>Collagen alpha-1(XXIII) chain</i>	Q86Y22		1.71				1.71		1.48				1.48							ND							ND	
<i>Collagen alpha-2(I) chain</i>	P08123	1.17	1.27	1.548	1.75	0.87	1.32	0.72	0.55	0.700	0.19	0.59	0.55	0.39	0.38	0.43	0.50	0.42	0.29	0.40	0.72	0.59	0.63	0.37	1.23	0.59	0.69	
<i>Collagen alpha-2(IX) chain</i>	Q14055				0.41		0.41				0.58		0.58	1.43	2.40	3.88				2.57	4.54	2.87	3.39				3.60	
<i>Collagen alpha-2(V) chain</i>	P05997	0.61	0.96		0.78	0.52	0.72	0.26	0.67		0.52	0.94	0.60		1.60	3.22	0.97			1.93	2.29			0.28	0.84	1.13		
<i>Collagen alpha-2(VI) chain</i>	P12110	0.80	0.59	0.840	0.61	0.76	0.72	0.40	0.39	0.611	0.17	1.20	0.55	0.76	0.57	0.77	0.80	0.40	0.30	0.60	1.73	1.38	1.45	0.88	0.47	0.71	1.10	
<i>Collagen alpha-2(XI) chain</i>	P13942		1.63	5.358	1.29	0.88	2.29		0.69	2.899	0.37	0.51	1.12	1.28	1.19	1.82	0.95	0.75	1.06	1.18	2.37	2.51	2.81	0.94	0.90	0.98	1.75	
<i>Collagen alpha-3(IX) chain</i>	Q14050						ND						ND		1.44	1.72				1.58	1.36						1.36	
<i>Collagen alpha-3(VI) chain</i>	P12111	0.81	0.61	0.861	0.41	0.68	0.67	0.37	0.38	0.591	0.17	1.05	0.51	0.61	0.53	0.57	0.79	0.46	0.35	0.55	1.75	1.24	1.24	0.77	0.49	0.87	1.06	
<i>Complement C1q subcomponent subunit A</i>	P02745						ND						ND							ND								ND
<i>Complement C1s subcomponent</i>	P09871	3.06	2.13		1.74		2.31	3.45	3.69			5.36	4.17							ND								ND
<i>Complement C3</i>	P01024	1.39			2.00		1.70	0.82				20.40	10.61	0.62	0.00	0.44				0.35	2.36	1.54	3.09				2.33	
<i>Complement C4-A</i>	P0C0L4		1.29				1.29		1.29				1.29	0.87						0.87	0.87		3.60	4.85			4.22	
<i>Complement factor B</i>	P00751				0.65		0.65				0.49		0.49	0.68						0.68	0.68		3.34	5.49			4.41	
<i>Complement factor D</i>	P00746		1.39	1.148			1.27		1.98	1.675			1.83	0.65			1.47			1.06		2.23	2.17		1.52	1.69	1.91	
<i>Complement factor H</i>	P08603					1.15	1.15					7.94	7.94							ND							ND	
<i>Complement factor H-related protein 1</i>	Q03591					1.15	1.15					7.94	7.94							ND							ND	
<i>Creatine kinase M-type</i>	P06732	0.82	0.57	0.09			0.49	0.40	0.68		0.24		0.44	4.08	2.28	2.44	0.46	3.27	0.61	2.19	2.72	1.73	4.14	1.10	3.80	0.58	2.35	
<i>C-type lectin domain family 11 member A</i>	Q9Y240		0.86	0.674	0.59		0.71		0.78	0.000	0.63		0.47	0.72	0.93	1.21	0.45	0.83	0.49	0.77	0.92	1.43	0.98	0.62	0.75	0.28	0.83	
<i>C-type lectin domain family 3 member A</i>	O75596	0.91	0.73	0.749	0.72	0.74	0.77	0.50	0.52	0.800	0.44	0.52	0.56	1.86	2.34	2.60	0.78	0.72	1.45	1.62	1.53	1.80	2.36	1.02	0.62	1.56	1.48	
<i>C-X-C motif chemokine 14</i>	O95715						ND						ND	1.85	1.43	3.28	2.08	0.72	2.09	1.91	2.18	1.38	1.43	3.20	0.61	2.23	1.84	
<i>Cystatin-B</i>	P04080			1.516			1.52			1.690			1.69	2.21						2.21			4.25	7.12			5.68	
<i>Cystatin-C</i>	P01034						ND						ND							ND							0.91	
<i>Cysteine-rich protein 2</i>	P52943	0.80					0.80	0.43					0.43					2.18		2.18					0.61	3.13	1.87	
<i>Decorin</i>	P07585	1.34	1.39	0.833	1.17	1.16	1.18	0.41	0.80	0.492	0.37	0.67	0.55	0.43	0.52	0.56	0.06	0.35	0.48	0.40	0.22	0.13	0.14	0.14	0.15	0.13	0.15	
<i>Dermatopontin</i>	Q07507	1.29	1.07	0.51	1.16		1.00	1.08	1.85		0.82	2.31	1.51							ND							ND	
<i>Dextrin</i>	P60981						ND						ND	1.55						1.55			4.06	4.54			4.30	
<i>Dihydropyrimidinase-related protein 2</i>	Q16555	0.82					0.82	0.60					0.60							ND							ND	
<i>Dihydropyrimidinase-related protein 3</i>	Q14195		0.75				0.75		0.95				0.95							ND							ND	
Protein name	Accesion	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T (A)	T (B)	T (C)	T (D)	T (E)	T (F)	T-mean	

Histone H2A type 1	P0C0S8	1.15	0.44	0.000	0.64	0.86	0.62	1.16	0.56	1.082	0.71	1.13	0.93	1.15	0.74	0.96	1.70	1.10	0.96	1.10	3.39	2.81	2.49	2.14	1.28	2.73	2.47	
Histone H2B type 1-B	P33778	1.12			0.45	0.84	0.80	1.19			0.37	0.60	0.72				1.30				1.30				1.40	1.63	1.51	
Histone H2B type 1-D	P58876	1.12			0.45		0.78	1.19			0.37		0.78		0.67	0.93	1.27	0.78	0.67		0.86	2.86		1.43	1.39	1.60	1.82	
Histone H2B type 1-K	O60814			0.983			0.98		1.278				1.28					0.77	0.66					1.42			1.42	
Histone H2B type 2-E	Q16778						ND						ND	0.86			1.30					1.90	2.08		1.40	1.63	1.75	
Histone H3.2	Q71D13						ND						ND				1.56	1.12	0.87					2.75	1.78	2.13	2.22	
Histone H3.3	P84243						ND						ND	1.18	1.26	1.76					1.40	2.57	2.36	2.43			2.46	
Histone H3-like	Q6NXT2	1.36	0.96	1.289	0.65		1.07	1.49	1.28	1.612	0.44		1.20								ND						ND	
Histone H4	P62805				0.44		0.44				1.27		1.27	1.19	1.19	1.44	2.14	0.60	0.81		1.23	4.07	3.61	2.57	3.36	0.86	1.60	2.68
Histone-lysine N-methyltransferase MLL3	Q8NEZ4		1.10		0.99		1.05		1.10		0.49		0.80								ND						ND	
Homeobox protein Hox-D13	P35453						ND						ND								ND						ND	
Homeobox-containing protein 1	Q6NT76						ND						ND								ND						ND	
Hyaluronan and proteoglycan link protein 1	P10915	0.55	0.93	0.403	0.46	0.33	0.53	0.23	0.41	0.276	0.33	0.39	0.33	1.36	2.16	2.37	1.86	1.14	1.41		1.72	1.71	1.47	1.82	1.90	0.93	0.89	1.45
Hyaluronan and proteoglycan link protein 4	Q86UW8			0.323			0.32			0.172			0.17								ND							ND
Ig alpha-1 chain C region	P01876				0.53	1.50	1.01				0.21	19.93	10.07	0.89			2.31				1.60		4.51	3.91		2.68	3.37	3.62
Ig gamma-1 chain C region	P01857	0.32	0.30	1.831	0.34	1.38	0.83	0.18	0.23	0.480	0.12	18.62	3.93	0.53	0.51	0.37	1.01	0.38	0.30		0.52	3.13	1.05	3.38	0.99	0.83	0.95	1.72
Ig gamma-2 chain C region	P01859	0.65	0.48		0.19	1.63	0.74	0.27	0.36		0.08	18.69	4.85		0.46	0.33	0.43				0.41	1.89			0.63	0.98	1.16	
Ig gamma-3 chain C region	P01860		0.31	5.831	0.32	1.51	1.99		0.23	1.196	0.11	22.31	5.96	0.54	0.48	0.37	1.02	0.38	0.32		0.52	3.32	1.10	3.44	0.99	0.87	1.05	1.79
Ig gamma-4 chain C region	P01861					1.75	1.75					21.77	21.77	0.85							0.85		0.68	2.44			1.56	
Ig heavy chain V-I region EU	P01742				0.23		0.23			0.00			0.00								ND						ND	
Ig heavy chain V-III region WEA	P01763						ND						ND				0.89				0.89				0.71	0.00	0.36	
Ig kappa chain C region	P01834	0.54	0.45	1.294	0.43	1.35	0.81	0.36	0.40	0.815	0.62	12.14	2.87	0.53	0.71	0.70	1.03	0.63	0.61		0.70	3.24	1.47	2.95	1.12	0.89	1.28	1.83
Ig kappa chain V-III region SIE	P01620						ND						ND								ND							ND
Ig lambda chain C regions	P01842		0.73	2.030	0.39	1.28	1.11		0.65	1.167	0.22	15.42	4.36	0.70	0.79	0.72	1.45	0.41	0.54		0.77	3.96	1.47	3.31	0.73	1.48	2.00	2.16
Immunoglobulin superfamily containing leuc	O14498						ND						ND	0.99	1.70	2.25	0.80	0.55	0.97		1.21	1.80	1.36	1.25	1.03	0.44	1.02	1.15
Inhibin beta A chain	P08476		4.23		1.26		2.74		9.21		2.69		5.95								ND							ND
Insulin-like growth factor-binding protein 7	Q16270					0.66	0.66					2.06	2.06								ND							ND
Inter-alpha-trypsin inhibitor heavy chain H1	P19827			1.133			1.13			0.000			0.00								ND							ND
Inter-alpha-trypsin inhibitor heavy chain H5	Q6UXX5						ND						ND	2.32	1.45	2.15		0.92	0.76		1.52	4.04	6.27	10.55	1.95			5.70
Isocitrate dehydrogenase [NADP] cytoplasmic	O75874						ND						ND	2.92	1.36	2.04	4.08	1.09	1.53		2.17	5.21	5.50	4.80	6.23	1.19	4.06	4.50
Keratin, type II cytoskeletal 1	P04264						ND						ND								ND							ND
Kinesin heavy chain isoform 5A	Q12840						ND						ND								ND							ND
Lactadherin	Q08431	1.14	0.96	0.397	0.91	0.41	0.76	0.47	0.46	0.360	0.19	0.39	0.37	2.01	2.51	3.18	2.26	1.31	2.26		2.25	1.58	2.90	1.91	2.58	0.73	1.25	1.82
Lactotransferrin	P02788				1.65		1.65				3.78		3.78		1.53	0.00					0.76	36.65						36.65
Lambda-crystallin homolog	Q9Y2S2						ND						ND				5.00				5.00					0.73	2.63	1.68
Lamin-A/C	P02545	0.54	0.65	0.295	0.32		0.45	0.31	0.60	0.276	3.88		1.27	0.61	0.69	0.92	1.11	0.68	0.33		0.72	2.93	1.49	1.77	1.06	1.64	1.10	1.66
Leucine-rich alpha-2-glycoprotein	P02750				1.78		1.78			0.00			0.00								ND							ND
Leukocyte cell-derived chemotaxin-2	O14960	2.29			0.91		1.60	1.87			1.00		1.43	1.06	1.74	1.54	2.25	0.78	1.20		1.43	2.85	5.68	3.05	2.71	1.03	3.15	3.08
Leukocyte elastase	P08246	2.31				1.56	1.94	4.27				2.15	3.21								ND							ND
L-lactate dehydrogenase A chain	P00338	1.05	0.78		0.44		0.76	0.57	1.26		0.34		0.72	1.60	1.08	1.24	1.96				1.47	1.97	1.53	1.26		0.97	1.23	1.39
L-lactate dehydrogenase B chain	P07195						ND						ND	0.79	0.46	1.22	4.22				1.67	9.36	3.65	7.44		1.07	2.10	4.72
Lubricin (proteoglycan 4)	Q92954	2.19	4.18	0.839	0.82	1.43	1.89	5.21	8.54	4.269	3.54	1.40	4.59	0.06	0.04	0.05	0.06	0.16	0.12		0.08	0.05	0.09	0.09	0.17	0.09	0.07	0.09
Lumican	P51884	1.65	2.32	1.252	1.55	1.28	1.61	0.71	2.03	1.284	0.93	1.57	1.30	0.12	0.13	0.22	0.07	0.22	0.33		0.18	0.16	0.10	0.13	0.08	0.14	0.12	0.12
Lysozyme C	P61626	2.00	0.95	1.416	0.99	0.66	1.20	1.88	1.48	1.472	1.30	0.72	1.37	1.41	2.39	1.86	11.57	3.16	1.44		3.64	17.48	10.83	8.60	13.70	8.09	6.75	10.91
Malate dehydrogenase, cytoplasmic	P40925						ND						ND		1.01	1.35	2.59	0.62	0.84		1.28	4.29			2.92	0.94	2.84	2.75
Malate dehydrogenase, mitochondrial	P40926				0.46		0.46				0.37		0.37	1.30			1.49				1.40		5.23	5.26		1.58	2.02	3.52
Matrilin-3	O15232			0.106	0.07		0.09			0.085	0.04		0.06	2.74	2.28	2.64	0.58	0.74	2.34		1.89	1.26	1.57	1.36	1.04	0.37	1.93	1.25
Matrix Gla protein	P08493						ND						ND	0.67			1.37	2.03	0.82		1.22		3.06	2.63	1.11	2.20	2.26	2.25
Melanoma-derived growth regulatory protei	Q16674						ND						ND	1.36							1.36		1.54	2.02				1.78
Melanotransferrin	P08582		1.62				1.62		2.66				2.66				2.20				2.20					1.44	2.14	1.79
Microfibril-associated glycoprotein 4	P55083	2.17			1.50		1.83	1.36			0.66		1.01	1.28	0.62	0.85	1.00	0.94	0.99		0.95	2.09	1.86	1.61	1.50	0.79	1.47	1.55
Mimecan	P20774	1.47	1.02	1.578	1.05	1.79	1.38	0.53	0.92	1.098	0.54	1.78	0.97	0.13	0.09	0.12	0.16	0.13	0.06		0.12	0.35	0.18	0.29	0.19	0.13	0.12	0.21
Mitofusin-1	Q8IWA4		5.13				5.13		1.54				1.54								ND							ND
Moesin	P26038		0.75		0.52		0.64		0.73		0.38		0.55	1.14	0.86	1.16	3.09	0.64	0.73		1.27	4.16	3.79	4.48	2.98	1.00	2.61	3.17
Myeloblastin	P24158	5.40					5.40	8.64					8.64								ND							ND
Myocilin	Q99972	0.93			0.25		0.59	0.66			0.80		0.73								ND							ND
Protein name	Accesion	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T (A)	T (B)	T (C)	T (D)	T (E)	T (F)	T-mean	

<i>Rab GDP dissociation inhibitor beta</i>	P50395		0.34				0.34		0.11				0.11	1.13	1.85	3.02							2.00	6.00	3.68	3.75					4.48
<i>Ras GTPase-activating-like protein IQGAP1</i>	P46940						ND						ND	2.11									2.11	5.70	5.37					5.53	
<i>Ras-like protein family member 11A</i>	Q6T310		7.04				7.04		8.14				8.14										ND							ND	
<i>Reticulocalbin-3</i>	Q96D15	1.03			0.38		0.71		0.25				0.23									1.11	1.69			0.71			0.71		
<i>Retinoic acid receptor responder protein 2</i>	Q99969	1.70	0.64	0.967	1.10		1.10		1.06	0.56	0.772	0.61	0.75		1.68	1.53					1.26	1.16		1.66		1.96		1.81			
<i>Retinol-binding protein 4</i>	P02753	1.80					1.80		2.06				2.06									1.58	3.22			0.80			0.80		
<i>Rho GTPase-activating protein 18-like</i>	Q5TG30						ND						ND									1.82				2.44	5.87		4.16		
<i>Rho GTPase-activating protein 30</i>	Q72616						ND						ND		1.46	1.70								1.57					1.57		
<i>Ribonuclease 4</i>	P34096	1.64	0.88	1.361	1.39		1.32		1.33	1.18	1.120	1.28	1.23	1.37	2.36	1.55	1.04	1.43	0.57				1.39	1.68	1.83	1.39	0.81	1.39	1.36	1.41	
<i>Ribosome-binding protein 1</i>	Q9P2E9						ND						ND																ND		
<i>Secernin-1</i>	Q12765						ND						ND									4.00							ND		
<i>Secreted frizzled-related protein 3</i>	Q92765				0.26		0.26					0.35	0.35	1.99	2.21	2.00	1.31	1.36	2.10				4.00				0.91	7.08	3.99		
<i>Selenium-binding protein 1</i>	Q13228						ND						ND	0.93	1.10	1.23								1.63	1.77	1.76	1.53	0.74	1.37	1.47	
<i>Semaphorin-4A</i>	Q9H3S1		4.47				4.47			4.61			4.61											1.09	6.80	6.47	9.31			7.52	
<i>Semaphorin-4C</i>	Q9C0C4					1.79	1.79					3.02	3.02																ND		
<i>Serine protease HTRA1</i>	Q92743	2.61	3.55	0.777	1.83	1.90	2.13		1.89	3.01	1.618	0.85	2.26	1.92	0.08	0.17	0.22	0.22	0.25	0.24			0.20	0.14	0.27	0.26	0.20	0.23	0.36	0.24	
<i>Serotransferrin</i>	P02787	0.84	0.48	1.566	0.53	1.50	0.98		0.73	0.38	0.772	0.19	11.51	2.71	0.60	0.52	0.63	0.61					0.59	1.90	0.90	3.17		1.04	0.57	1.52	
<i>Serum albumin</i>	P02768	0.50	0.35	0.835	0.32	2.09	0.82		0.25	0.23	0.541	0.15	19.94	4.22	0.60	0.36	0.36	0.42	0.53	0.28			0.42	1.43	0.46	0.99	0.43	0.71	0.36	0.73	
<i>Serum amyloid P-component</i>	P02743	0.73					0.73		0.40				0.40						1.18	0.52			0.85			0.97			0.97		
<i>SPARC</i>	P09486		0.45		0.27		0.36		0.31			0.07	0.19	1.93	3.63	1.75			1.11	0.61			1.81	0.85	0.60	0.54	0.23		0.56		
<i>SPARC-related modular calcium-binding pr</i>	Q9H3U7						ND						ND																ND		
<i>Spectrin alpha chain, brain</i>	Q13813						ND						ND	0.59									0.59		1.53	3.02			2.27		
<i>Stanniocalcin-2</i>	O76061						ND						ND	10.65	8.50								9.57	1.85					1.85		
<i>Stromal cell-derived factor 1</i>	P48061	1.69			0.84		1.26		1.18			1.02	1.10		2.03	2.42							2.22	1.48					1.48		
<i>Stromelysin-1</i>	P08254	1.63	0.62				1.13		2.08	1.00			1.54																ND		
<i>Superoxide dismutase [Cu-Zn]</i>	P00441						ND						ND																ND		
<i>Sushi repeat-containing protein SRPX2</i>	O60687	0.49	0.57	0.582	0.38	0.43	0.49		0.25	0.46	0.582	0.13	0.70	0.42	2.13	2.04	3.89	1.57	0.78	2.18			2.10	2.52	1.87	1.94	1.67	0.45	1.41	1.64	
<i>Target of Nesh-SH3</i>	Q7Z7G0	2.12	2.46	2.556	1.45	1.45	2.00		2.22	3.57	2.621	1.65	2.70	2.55		0.06	0.06	0.06	0.10	0.04			0.06	0.14		0.10	0.06	0.08	0.10		
<i>Tenascin</i>	P24821	0.97	4.14		0.19		1.77		0.50	2.62		0.10	1.07																ND		
<i>Tenascin-X</i>	P22105	0.58	0.56	0.362	0.20	0.57	0.45		0.42	0.45	0.320	0.15	0.76	0.42															ND		
<i>Tetranectin</i>	P05452	0.36			0.08		0.22		0.18			0.02	0.10	0.32	0.39	0.69	1.65						0.76	3.23	2.04	3.17		1.12	1.89	2.29	
<i>Thrombospondin type-1 domain-containing</i>	Q6ZMP0						ND						ND	1.49			25.52						13.50		15.69	67.31		3.67	9.16	23.96	
<i>Thrombospondin-1</i>	P07996	1.53	0.66	0.347	0.88	1.19	0.92		0.30	0.25	0.209	0.09	0.87	0.34	0.98	1.04	1.66	1.12	0.47	1.43			1.11	0.92	0.92	1.36	1.26	0.48	0.80	0.96	
<i>Thrombospondin-3</i>	P49476	1.55		0.991	1.06	1.12	1.18		0.72		1.028	0.37	1.15	0.82	0.38	0.33	0.45						0.39	0.12	0.09	0.10			0.10		
<i>Thrombospondin-4</i>	P35443						ND						ND																ND		
<i>Transaldolase</i>	P37837						ND						ND					1.28					1.28				0.48	1.57	1.03		
<i>Transforming growth factor-beta-induced pr</i>	Q15582	2.07	1.36	1.100	0.35		1.22		1.42	1.53	1.599	0.24	1.20	0.93	1.13	1.42	1.05						1.13	2.49	1.56	1.80		1.04	0.00	1.38	
<i>Transgelin</i>	Q01995						ND						ND	1.25										1.25		10.77	6.64			8.71	
<i>Transketolase</i>	P29401						ND						ND				2.61						2.61				1.52	1.75	1.64		
<i>Translationally-controlled tumor protein</i>	P13693						ND						ND				3.31						3.31				1.23	2.90	2.06		
<i>Transmembrane protein 132D</i>	Q14C87	1.82					1.82		1.26				1.26																ND		
<i>Transthyretin</i>	P02766	0.76	0.60		0.39	1.68	0.86		0.45	0.44		0.13	7.06	2.02	0.70	0.47	0.59	0.74	0.37	0.30			0.53	1.83	0.87	1.40	0.47	1.08	0.80	1.07	
<i>Triosephosphate isomerase</i>	P60174	1.09	1.03		0.47	0.85	0.86		0.72	0.83		0.26	0.99	0.70	1.37	0.90	1.24	1.08	0.89	0.67			1.03	2.19	1.69	1.44	1.15	0.74	1.43	1.44	
<i>Tropomyosin alpha-4 chain</i>	P67936						ND						ND		1.87	1.53			4.02	1.13			2.14	3.16		1.68			2.42		
<i>Tropomyosin beta chain</i>	P07951						ND						ND					1.79									4.36	2.15	3.25		
<i>Tryptase beta-1</i>	Q15661						ND						ND		0.83	1.02							0.93	3.68					3.68		
<i>Tubulin alpha-1C chain</i>	Q9BQE3						ND						ND					3.93					3.93				1.59	2.79	2.19		
<i>Tubulin beta-2B chain</i>	Q9BVA1	1.35			0.30		0.82		0.93			0.41	0.67						0.68	1.05			0.86			3.75			3.75		
<i>Tumor necrosis factor receptor superfamily</i>	O00300	3.34	3.98	0.897	1.28		2.38		1.45	3.11	1.290	1.35	1.80																ND		
<i>Ubiquitin carboxyl-terminal hydrolase 25</i>	Q9UHP3				0.18		0.18					0.11	0.11																ND		
<i>Ubiquitin</i>	P62988						ND						ND				2.22						2.22				2.12	2.23	2.18		
<i>UDP-GlcNAc:betaGal beta-1,3-N-acetylgluc</i>	Q8NFL0			1.32			1.32					1.13	1.13																ND		
<i>Uncharacterized protein C12orf70</i>	A6NFE2						ND						ND																ND		
<i>UTP--glucose-1-phosphate uridylyltransfera</i>	Q16851						ND						ND																ND		
<i>Vacuolar protein sorting-associated protein</i>	Q9P253						ND						ND																ND		
<i>Vascular endothelial growth factor receptor</i>	P17948		4.65				4.65			4.18			4.18																ND		
Protein name	Accesion	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T(A)	T(B)	T(C)	T(D)	T(E)	T(F)	T-mean				

<i>Versican core protein</i>	P13611	2.29	1.80	3.101	2.17	1.97	2.27	1.78	1.86	3.535	3.68	4.19	3.01				0.30				0.24	0.37	0.31				
<i>Vimentin</i>	P08670	0.40	0.24	0.309	0.16	0.20	0.26	0.24	0.27	0.349	0.08	0.23	0.23	0.92	0.73	1.13	1.78	0.60	0.54	0.95	2.81	3.31	3.18	1.91	1.01	2.43	2.44
<i>Vitamin D-binding protein</i>	P02774		0.22		0.46	1.50	0.73		0.00		0.11	8.90	3.00							ND							ND
<i>Vitrin</i>	Q6UXI7						ND						ND							ND							ND
<i>Vitronectin</i>	P04004	1.12	0.71	0.509	0.37	0.73	0.69	0.90	0.56	0.604	0.15	2.24	0.89				0.73			0.73				1.54	1.29	1.41	
<i>Zinc-alpha-2-glycoprotein</i>	P25311					3.71	3.71					7.91	7.91							ND							ND
Protein name	Accession	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T (A)	T (B)	T (C)	T (D)	T (E)	T (F)	T-mean

<i>Versican core protein</i>	P13611	2.29	1.80	3.101	2.17	1.97	2.27	1.78	1.86	3.535	3.68	4.19	3.01				0.30				0.24	0.37	0.31					
<i>Vimentin</i>	P08670	0.40	0.24	0.309	0.16	0.20	0.26	0.24	0.27	0.349	0.08	0.23	0.23	0.92	0.73	1.13	1.78	0.60	0.54	0.95	2.81	3.31	3.18	1.91	1.01	2.43	2.44	
<i>Vitamin D-binding protein</i>	P02774		0.22		0.46	1.50	0.73		0.00		0.11	8.90	3.00							ND							ND	
<i>Vitrin</i>	Q6UXI7						ND						ND							ND								ND
<i>Vitronectin</i>	P04004	1.12	0.71	0.509	0.37	0.73	0.69	0.90	0.56	0.604	0.15	2.24	0.89				0.73			0.73				1.54	1.29	1.41		
<i>Zinc-alpha-2-glycoprotein</i>	P25311					3.71	3.71					7.91	7.91							ND							ND	
Protein name	Accession	AF7	AF6	AF3	AF9	AF2	AF-mean	NP7	NP6	NP3	NP9	NP2	NP-mean	R (A)	R (B)	R (C)	R (D)	R (E)	R (F)	R-mean	T (A)	T (B)	T (C)	T (D)	T (E)	T (F)	T-mean	

Supplemental table 2

Intracellular proteins	Plasma proteins	insufficient amount of data (<50%)
<i>14-3-3 protein eta</i>	<i>Alpha-1-acid glycoprotein 1</i>	<i>Bone morphogenetic protein 3b</i>
<i>14-3-3 protein gamma</i>	<i>Alpha-1B-glycoprotein</i>	<i>Cathepsin D</i>
<i>14-3-3 protein theta</i>	<i>Alpha-2-HS-glycoprotein</i>	<i>Cathepsin G</i>
<i>14-3-3 protein zeta/delta</i>	<i>Alpha-2-macroglobulin</i>	<i>CD44 antigen</i>
<i>1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta-1</i>	<i>Antithrombin-III</i>	<i>CD9 antigen</i>
<i>40S ribosomal protein S20</i>	<i>Beta-2-glycoprotein 1</i>	<i>Chordin-like protein 2</i>
<i>4-trimethylaminobutyraldehyde dehydrogenase</i>	<i>Ceruloplasmin</i>	<i>Collagen alpha-1(XII) chain</i>
<i>78 kDa glucose-regulated protein</i>	<i>Coagulation factor XIII A chain</i>	<i>Collagen alpha-1(XXI) chain</i>
<i>Actin, alpha cardiac muscle 1</i>	<i>Complement C1q subcomponent A</i>	<i>Collagen alpha-1(XXIII) chain</i>
<i>Actin, aortic smooth muscle</i>	<i>Complement C1s subcomponent</i>	<i>Collagen alpha-3(IX) chain</i>
<i>Actin, cytoplasmic 1</i>	<i>Complement C3</i>	<i>Cysteine-rich protein 2</i>
<i>Adenomatous polyposis coli protein 2</i>	<i>Complement C4-A</i>	<i>Fin bud initiation factor homolog</i>
<i>Adenylate kinase isoenzyme 1</i>	<i>Complement factor B</i>	<i>HEAT repeat-containing protein 7A</i>
<i>Adenylyl cyclase-associated protein 1</i>	<i>Complement factor D</i>	<i>Hemoglobin subunit gamma-1</i>
<i>Adipocyte enhancer-binding protein 1</i>	<i>Complement factor H</i>	<i>Hyaluronan and proteoglycan link protein 4</i>
<i>Adseverin</i>	<i>Complement factor H-related protein 1</i>	<i>Inhibin beta A chain</i>
<i>Alcohol dehydrogenase [NADP+]</i>	<i>Fibrinogen alpha chain</i>	<i>Insulin-like growth factor-binding protein 7</i>
<i>Alcohol dehydrogenase 1B</i>	<i>Fibrinogen beta chain</i>	<i>Kinesin heavy chain isoform 5A</i>
<i>Alpha-actinin-1</i>	<i>Fibrinogen gamma chain</i>	<i>Lactotransferrin</i>
<i>Alpha-crystallin B chain</i>	<i>Haptoglobin</i>	<i>Melanoma-derived growth regulatory protein</i>
<i>Alpha-enolase</i>	<i>Haptoglobin-related protein</i>	<i>Melanotransferrin</i>
<i>Annexin A1</i>	<i>Hemopexin</i>	<i>Myeloblastin</i>
<i>Annexin A2</i>	<i>Ig alpha-1 chain C region</i>	<i>Myocilin</i>
<i>Annexin A5</i>	<i>Ig gamma-1 chain C region</i>	<i>Pleiotrophin</i>
<i>Annexin A6</i>	<i>Ig gamma-2 chain C region</i>	<i>Plexin domain-containing protein 2</i>
<i>Argininosuccinate synthase</i>	<i>Ig gamma-3 chain C region</i>	<i>Probable serine protease HTRA3</i>
<i>ATP synthase subunit beta, mitochondrial</i>	<i>Ig gamma-4 chain C region</i>	<i>Protein FAM59B</i>
<i>Bardet-Biedl syndrome 12 protein</i>	<i>Ig heavy chain V-I region EU</i>	<i>Protein S100-A4</i>
<i>Beta-enolase</i>	<i>Ig heavy chain V-III region WEA</i>	<i>Protein S100-A6</i>
<i>Calmodulin</i>	<i>Ig kappa chain C region</i>	<i>Protein S100-A8</i>
<i>Carbohydrate sulfotransferase 3</i>	<i>Ig kappa chain V-III region SIE</i>	<i>Retinol-binding protein 4</i>
<i>Carbonic anhydrase 1</i>	<i>Ig lambda chain C regions</i>	<i>Putative V-set and Ig-domain-containing-like protein</i>
<i>Carbonic anhydrase 2</i>	<i>Leukocyte elastase</i>	<i>Semaphorin-4A</i>
<i>Carbonic anhydrase 3</i>	<i>Pigment epithelium-derived factor</i>	<i>Semaphorin-4C</i>
<i>Carbonyl reductase [NADPH] 3</i>	<i>Plasma protease C1 inhibitor</i>	<i>Stanniocalcin-2</i>
<i>Cofilin-1</i>	<i>Plasma serine protease inhibitor</i>	<i>Stromal cell-derived factor 1</i>

<i>Creatine kinase M-type</i>	<i>Plasminogen activator inhibitor 1</i>	<i>Stromelysin-1</i>
<i>Cystatin-B</i>	<i>Plasminogen</i>	<i>Thrombospondin-4</i>
<i>Cystatin-C</i>	<i>Prothrombin</i>	<i>Transmembrane protein 132D</i>
<i>Dextrin</i>	<i>Serotransferrin</i>	<i>Tryptase beta-1</i>
<i>Dihydropyrimidinase-related protein 2</i>	<i>Serum albumin</i>	<i>Uncharacterized protein C12orf70</i>
<i>Dihydropyrimidinase-related protein 3</i>	<i>Serum amyloid P-component</i>	<i>Vascular endothelial growth factor receptor 1</i>
<i>Disheveled-associated activator of morphogenesis 2</i>	<i>Transthyretin</i>	
<i>Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 1</i>	<i>Vitamin D-binding protein</i>	
<i>EH domain-containing protein 2</i>	<i>Zinc-alpha-2-glycoprotein</i>	
<i>Elongation factor Tu GTP-binding domain-containing protein 1</i>		
<i>Endoplasmin</i>		
<i>Fascin</i>		
<i>Fatty acid desaturase 2-like protein</i>		
<i>Fatty acid-binding protein, adipocyte</i>		
<i>F-box only protein 2</i>		
<i>F-box/WD repeat-containing protein 12</i>		
<i>Ferritin heavy chain</i>		
<i>Ferritin light chain</i>		
<i>Filamin-B</i>		
<i>Flavin reductase</i>		
<i>Four and a half LIM domains protein 1</i>		
<i>Fructose-bisphosphate aldolase A</i>		
<i>Gelsolin</i>		
<i>Glutathione peroxidase 3</i>		
<i>Glutathione S-transferase P</i>		
<i>Glyceraldehyde-3-phosphate dehydrogenase</i>		
<i>Glycogen phosphorylase, brain form</i>		
<i>Glycogen phosphorylase, liver form</i>		
<i>Heat shock 70 kDa protein 1</i>		
<i>Heat shock 70 kDa protein 6</i>		
<i>Heat shock cognate 71 kDa protein</i>		
<i>Heat shock protein beta-1</i>		
<i>Heat shock protein HSP 90-alpha</i>		
<i>Hemoglobin subunit alpha</i>		
<i>Hemoglobin subunit beta</i>		
<i>Hemoglobin subunit delta</i>		
<i>Heterogeneous nuclear ribonucleoprotein D0</i>		
<i>Histone H1,0</i>		

<i>Histone H1,2</i>		
<i>Histone H1,3</i>		
<i>Histone H1,4</i>		
<i>Histone H1,5</i>		
<i>Histone H2A type 1</i>		
<i>Histone H2B type 1-B</i>		
<i>Histone H2B type 1-D</i>		
<i>Histone H2B type 1-K</i>		
<i>Histone H2B type 2-E</i>		
<i>Histone H3,2</i>		
<i>Histone H3,3</i>		
<i>Histone H3-like</i>		
<i>Histone H4</i>		
<i>Histone-lysine N-methyltransferase MLL3</i>		
<i>Homeobox protein Hox-D13</i>		
<i>Homeobox-containing protein 1</i>		
<i>Isocitrate dehydrogenase [NADP] cytoplasmic</i>		
<i>Keratin, type II cytoskeletal 1</i>		
<i>Lambda-crystallin homolog</i>		
<i>Lamin-A/C</i>		
<i>Leucine-rich alpha-2-glycoprotein</i>		
<i>Leukocyte cell-derived chemotaxin-2</i>		
<i>L-lactate dehydrogenase A chain</i>		
<i>L-lactate dehydrogenase B chain</i>		
<i>Malate dehydrogenase, cytoplasmic</i>		
<i>Malate dehydrogenase, mitochondrial</i>		
<i>Mitofusin-1</i>		
<i>Moesin</i>		
<i>Myoglobin</i>		
<i>Myosin light polypeptide 6</i>		
<i>Myosin-2</i>		
<i>Myosin-7</i>		
<i>Nesprin-2</i>		
<i>Neuroblast differentiation-associated protein AHNAK</i>		
<i>Neuron navigator 3</i>		
<i>Nucleoside diphosphate kinase A</i>		
<i>Nucleoside diphosphate kinase B</i>		
<i>Peptidyl-prolyl cis-trans isomerase A</i>		

<i>Peptidyl-prolyl cis-trans isomerase B</i>		
<i>Peptidyl-prolyl cis-trans isomerase C</i>		
<i>Peroxiredoxin-1</i>		
<i>Peroxiredoxin-2</i>		
<i>Peroxiredoxin-4</i>		
<i>Peroxiredoxin-5, mitochondrial</i>		
<i>Peroxiredoxin-6</i>		
<i>Phosphatidylethanolamine-binding protein 1</i>		
<i>Phosphoglycerate kinase 1</i>		
<i>Phosphoglycerate mutase 1</i>		
<i>Phosphoglycerate mutase 2</i>		
<i>Polymerase I and transcript release factor</i>		
<i>Profilin-1</i>		
<i>Protein disulfide-isomerase A3</i>		
<i>Protein disulfide-isomerase</i>		
<i>Protein piccolo</i>		
<i>Protein transport protein Sec16B</i>		
<i>Putative annexin A2-like protein</i>		
<i>Putative elongation factor 1-alpha-like 3</i>		
<i>Putative endoplasmic-like protein</i>		
<i>Pyruvate kinase isozymes M1/M2</i>		
<i>Quinone oxidoreductase</i>		
<i>Rab GDP dissociation inhibitor beta</i>		
<i>Ras GTPase-activating-like protein IQGAP1</i>		
<i>Ras-like protein family member 11A</i>		
<i>Reticulocalbin-3</i>		
<i>Rho GTPase-activating protein 18-like</i>		
<i>Rho GTPase-activating protein 30</i>		
<i>Ribonuclease 4</i>		
<i>Ribosome-binding protein 1</i>		
<i>Secernin-1</i>		
<i>Selenium-binding protein 1</i>		
<i>Spectrin alpha chain, brain</i>		
<i>Superoxide dismutase [Cu-Zn]</i>		
<i>Transaldolase</i>		
<i>Transgelin</i>		
<i>Transketolase</i>		
<i>Translationally-controlled tumor protein</i>		

<i>Triosephosphate isomerase</i>		
<i>Tropomyosin alpha-4 chain</i>		
<i>Tropomyosin beta chain</i>		
<i>Tubulin alpha-1C chain</i>		
<i>Tubulin beta-2B chain</i>		
<i>Tubulin beta-8 chain</i>		
<i>Ubiquitin carboxyl-terminal hydrolase 25</i>		
<i>Ubiquitin</i>		
<i>UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7</i>		
<i>UTP--glucose-1-phosphate uridylyltransferase</i>		
<i>Vacuolar protein sorting-associated protein 18 homolog</i>		
<i>Vimentin</i>		

Table 3a Femoral head vs tibial knee articular cartilage**T-test**

Protein name	Accession	Fold Change	Raw p value
Hyaluronan and proteoglycan link protein	P10915	2.45	<0.001
Chondroadherin	O15335	2.17	0.002
Lactadherin	Q08431	2.04	0.016
SPARC-related modular calcium-binding protein 2	Q9H3U7	1.97	<0.001
FGF-binding protein 2	Q9BYJ0	1.80	0.034
Decorin	P07585	0.68	0.022
Extracellular superoxide dismutase [Cu-Zn]	P08294	0.65	<0.001
Collagen alpha-3(VI)	P12111	0.59	<0.001
Tenascin-X	P22105	0.58	0.026
Collagen alpha-2(I)	P08123	0.53	0.046
Collagen alpha-1(VI)	P12109	0.53	<0.001
Collagen alpha-2(VI)	P12110	0.52	<0.001
Alpha-1-antitrypsin	P01009	0.50	0.002
Alpha-1-antichymotrypsin	P01011	0.50	0.024
Collagen alpha-1(III)	P02461	0.49	0.008
Target of Nesh-SH3	Q7Z7G0	0.44	0.022
Lumican	P51884	0.32	<0.001
Asporin	Q9BXN1	0.28	0.002
Mimecan	P20774	0.24	<0.001

Table 3b Femoral vs humeral head articular cartilage

	T-test		
Protein name	Accession	Fold Change	Raw p value
Cartilage intermediate layer protein 1	O75339	3.03	0.044
Pleckstrin homology domain-containing family A6	Q9Y2H5	2.75	0.03
Matrilin-3	O15232	2.72	<0.001
Phospholipase A2, membrane associated	P14555	2.61	0.016
Angiopoietin-related protein 2	Q9UKU9	2.50	0.01
SPARC-related modular calcium-binding protein 2	Q9H3U7	2.46	<0.001
Serine protease HTRA1	Q92743	2.04	0.018
Clusterin	P10909	1.96	0.042
Hyaluronan and proteoglycan link protein	P10915	1.81	0.006
Aggrecan core protein	P16112	1.53	0.02
Biglycan	P21810	0.69	0.024
Alpha-1-antitrypsin	P01009	0.50	0.042
Collagen alpha-2(I)	P08123	0.50	0.024
Collagen alpha-3(VI)	P12111	0.50	0.024
Collagen alpha-1(III)	P02461	0.48	0.008
Collagen alpha-1(VI)	P12109	0.47	0.018
Tenascin-X	P22105	0.44	0.032
Apolipoprotein A-I	P02647	0.37	0.012
Mimecan	P20774	0.35	0.01

Table 3c Humeral head vs tibial knee articular cartilage**T-test**

Protein name	Accession	Fold Change	Raw p value
Collagen alpha-1(II)	P02458	2.35	0.024
Chondroadherin	O15335	2.12	0.004
HHIP-like protein 2	Q6UWX4	1.54	0.032
Biglycan	P21810	1.53	0.048
Fibromodulin	Q06828	1.33	0.022
Decorin	P07585	0.66	0.038
Lumican	P51884	0.51	0.018
Asporin	Q9BXN1	0.44	0.01

Table 3d Tibial knee articular cartilage vs meniscal cartilage**T-test**

Protein name	Accession	Fold change	Raw p value
Pleckstrin homology domain-containing family A6	Q9Y2H5	38.72	0.022
Phospholipase A2, membrane associated	P14555	35.40	0.032
Hyaluronan and proteoglycan link protein	P10915	14.81	0.003
Collagen alpha-1(II)	P02458	11.27	0.006
Aggrecan core protein	P16112	10.42	0.005
Lysozyme C	P61626	5.85	0.042
Angiogenin	P03950	5.63	0.009
FGF-binding protein 2	Q9BYJ0	4.96	0.030
Chondroadherin	O15335	4.92	0.001
Osteoadherin	Q99983	4.64	0.001
C-type lectin domain family 3A	O75596	3.63	0.006
Sushi repeat-containing protein SRPX2	O60687	3.39	0.009
HHIP-like protein 2	Q6UWX4	3.13	0.040
Angiopoietin-related protein 2	Q9UKU9	3.08	0.040
Retinoic acid receptor responder protein 2	Q99969	2.07	0.033
Cartilage intermediate layer protein 2	Q8IUL8	2.01	0.012
Fibromodulin	Q06828	1.56	0.020
Collagen alpha-3(VI)	P12111	0.38	0.035
Procollagen C-endopeptidase enhancer 1	Q15113	0.37	0.040
Target of Nesh-SH3	Q7Z7G0	0.34	0.043
Tenascin-X	P22105	0.29	0.020
Versican	P13611	0.21	0.038
Asporin	Q9BXN1	0.18	0.022
Apolipoprotein D	P05090	M only	
SPARC-related modular calcium-binding protein 2	Q9H3U7	K only	

Table 3e Femoral head articular cartilage vs annulus fibrosus cartilage**T-test**

Protein name	Accession	Fold Change	Raw p value
Matrilin-3	O15232	16.59	<0.001
Protein S100-B	P04271	6.00	<0.001
Phospholipase A2, membrane associated	P14555	5.95	0.006
Pleckstrin homology domain-containing family A6	Q9Y2H5	5.85	0.018
Hyaluronan and proteoglycan link protein	P10915	4.27	<0.001
Augurin	Q9H1Z8	2.63	<0.001
Retinoic acid receptor responder protein 2	Q99969	2.44	0.014
Biglycan	P21810	2.35	<0.001
Collagen alpha-1(II)	P02458	2.01	0.012
Fibromodulin	Q06828	1.83	0.002
Aggrecan core protein	P16112	1.50	0.016
Decorin	P07585	0.72	0.03
Extracellular superoxide dismutase [Cu-Zn]	P08294	0.47	<0.001
Alpha-1-antichymotrypsin	P01011	0.44	0.01
Asporin	Q9BXN1	0.42	0.012
Alpha-1-antitrypsin	P01009	0.41	<0.001
Collagen alpha-2(XI)	P13942	0.38	0.048
Coiled-coil domain-containing protein 80	Q76M96	0.35	0.018
Serine protease HTRA1	Q92743	0.35	0.008
Fibronectin	P02751	0.31	0.014
Lubricin (Proteglycan 4)	Q92954	0.27	0.02
Mimecan	P20774	0.26	0.002
Lumican	P51884	0.20	<0.001
Collagen alpha-2(I)	P08123	0.18	<0.001
Protein S100-A9	P06702	0.17	0.006
Glia-derived nexin	P07093	0.17	0.026
Versican	P13611	0.11	<0.001
Target of Nesh-SH3	Q7Z7G0	0.07	0.004
Apolipoprotein D	P05090	AF only	
SPARC-related modular calcium-binding protein 2	Q9H3U7	F only	

Table 3f Femoral head articular cartilage vs nucleus pulposus cartilage**T-test**

Protein name	Accesion	Fold Change	Raw p value
Matrilin-3	O15232	23.36	<0.001
Tetranectin	P05452	11.87	<0.001
Hyaluronan and proteoglycan link protein	P10915	6.97	<0.001
Phospholipase A2, membrane associated	P14555	6.94	0.004
Pleckstrin homology domain-containing family A6	Q9Y2H5	5.44	0.048
Protein S100-B	P04271	4.86	0.008
Fibromodulin	Q06828	4.57	<0.001
Biglycan	P21810	3.74	<0.001
Retinoic acid receptor responder protein 2	Q99969	3.58	0.012
Thrombospondin-1	P07996	2.89	0.03
Collagen alpha-1(II)	P02458	2.49	<0.001
Basement membrane-specific HS proteoglycan (Perlecan)	P98160	2.48	0.036
Lactadherin	Q08431	2.48	0.02
PRELP	P51888	2.32	<0.001
Aggrecan core protein	P16112	1.78	<0.001
FGF-binding protein 2	Q9BYJ0	1.73	0.026
Decorin	P07585	1.54	0.038
Extracellular superoxide dismutase [Cu-Zn]	P08294	0.48	0.024
Collagen alpha-2(I)	P08123	0.44	0.016
Asporin	Q9BXN1	0.39	0.006
Serine protease HTRA1	Q92743	0.38	0.008
Mimecan	P20774	0.37	0.018
TNF receptor superfamily member 11B	O00300	0.36	<0.001
Fibronectin	P02751	0.31	0.016
Coiled-coil domain-containing protein 80	Q76M96	0.29	0.036
Lumican	P51884	0.25	<0.001
Alpha-1-antitrypsin	P01009	0.18	0.004
Alpha-1-antichymotrypsin	P01011	0.14	0.012
Glia-derived nexin	P07093	0.13	<0.001
Protein S100-A9	P06702	0.13	<0.001
Lubricin (Proteglycan 4)	Q92954	0.11	<0.001
Versican	P13611	0.08	<0.001
Target of Nesh-SH3	Q7Z7G0	0.06	0.002
Apolipoprotein D	P05090	NP only	
SPARC-related modular calcium-binding protein 2	Q9H3U7	F only	

Table 3g Femoral head articular cartilage vs rib cartilage

Protein name	Accession	T-test	
		Fold Change	Raw p value
Pleckstrin homology domain-containing family A6	Q9Y2H5	6.63	<0.001
Cartilage intermediate layer protein 2	Q8IUL8	6.55	<0.001
Cartilage oligomeric matrix protein	P49747	6.48	<0.001
Lubricin (Proteglycan 4)	Q92954	6.22	<0.001
Phospholipase A2, membrane associated	P14555	5.65	<0.001
Serine protease HTRA1	Q92743	3.77	<0.001
Collagen alpha-1(III)	P02461	3.36	<0.001
Mimecan	P20774	3.17	<0.001
Clusterin	P10909	2.52	0.002
Target of Nesh-SH3	Q7Z7G0	2.27	0.008
Decorin	P07585	2.12	<0.001
Retinoic acid receptor responder protein 2	Q99969	1.91	0.02
Lumican	P51884	1.78	0.046
Hyaluronan and proteoglycan link protein	P10915	1.33	0.046
Chondroadherin	O15335	0.65	0.002
Collagen alpha-2(I)	P08123	0.61	0.012
Lactadherin	Q08431	0.41	0.008
Extracellular superoxide dismutase [Cu-Zn]	P08294	0.37	0.02
Sushi repeat-containing protein SRPX2	O60687	0.33	0.012
Lysozyme C	P61626	0.32	0.014
Alpha-1-antitrypsin	P01009	0.29	0.006
Coiled-coil domain-containing protein 80	Q76M96	0.29	0.028
SPARC	P09486	0.13	0.02
Chondromodulin-1	O75829	0.12	<0.001
Cartilage matrix protein	P21941	0.02	0.008
Epiphycan	Q99645	R only	
C-X-C motif chemokine 14	O95715	R only	
Immunoglobulin superfamily containing LRR protein	O14498	R only	
Microfibril-associated glycoprotein 4	P55083	R only	
Secreted frizzled-related protein 3	Q92765	R only	
SPARC-related modular calcium-binding protein 2	Q9H3U7	F only	
Tenascin-X	P22105	F only	

Table 3h Femoral head articular cartilage vs tracheal cartilage

Protein name	Accession	T-test	
		Fold Change	Raw p value
Cartilage oligomeric matrix protein	P49747	22.24	<0.001
Thrombospondin-3	P49476	9.81	0.022
Cartilage intermediate layer protein 1	O75339	9.29	<0.001
Cartilage intermediate layer protein 2	Q8IUL8	7.15	0.008
Decorin	P07585	5.58	<0.001
Lubricin (Proteglycan 4)	Q92954	5.44	<0.001
Fibronectin	P02751	4.44	0.004
Phospholipase A2, membrane associated	P14555	4.19	0.004
Clusterin	P10909	3.26	0.01
Collagen alpha-1(III)	P02461	3.25	<0.001
Serine protease HTRA1	Q92743	3.04	0.01
Augurin	Q9H1Z8	2.95	0.006
FGF-binding protein 2	Q9BYJ0	2.77	0.01
Lumican	P51884	2.66	<0.001
Pleckstrin homology domain-containing family A6	Q9Y2H5	2.53	0.026
Aggrecan core protein	P16112	1.61	0.006
Hyaluronan and proteoglycan link protein	P10915	1.57	<0.001
Alpha-1-antitrypsin	P01009	0.61	0.04
Basement membrane-specific HS proteoglycan (Perlecan)	P98160	0.56	0.014
Collagen alpha-2(VI)	P12110	0.51	0.032
Lactadherin	Q08431	0.51	0.038
Collagen alpha-1(VI)	P12109	0.50	0.032
Leukocyte cell-derived chemotaxin-2	O14960	0.46	0.026
Collagen alpha-3(VI)	P12111	0.46	0.002
Sushi repeat-containing protein SRPX2	O60687	0.43	0.012
Protein S100-B	P04271	0.36	0.002
Collagen alpha-2(I)	P08123	0.35	0.002
Galectin-1	P09382	0.35	<0.001
TGF-beta-induced protein ig-h3	Q15582	0.33	0.002
Lysozyme C	P61626	0.11	<0.001
Chondromodulin-1	O75829	0.10	0.004
Cartilage matrix protein	P21941	0.02	0.002
Epiphycan	Q99645	T only	
C-X-C motif chemokine 14	O95715	T only	
Immunoglobulin superfamily containing LRR protein	O14498	T only	
Microfibril-associated glycoprotein 4	P55083	T only	
Secreted frizzled-related protein 3	Q92765	T only	
Tenascin-X	P22105	F only	
SPARC-related modular calcium-binding protein 2	Q9H3U7	F only	

Table 3i Annulus fibrosus vs nucleus pulposus cartilage

Protein name	Accession	T-test	
		Fold Change	Raw p value
Collagen alpha-1(V)	P20908	2.74	0.034
Thrombospondin-1	P07996	2.68	0.03
Fibromodulin	Q06828	2.50	0.006
Collagen alpha-2(I)	P08123	2.40	<0.001
Decorin	P07585	2.15	0.008
PRELP	P51888	2.03	0.004
Cartilage intermediate layer protein 1	O75339	1.70	0.022
Hyaluronan and proteoglycan link protein	P10915	1.63	0.046
Biglycan	P21810	1.59	0.02
C-type lectin domain family 3A	O75596	1.38	0.032
Alpha-1-antitrypsin	P01009	0.44	<0.001
Apolipoprotein D	P05090	0.32	0.05

Table 3j Annulus fibrosus vs meniscal cartilage

Protein name	Accession	T-test	
		Fold-Change	Raw p value
Coiled-coil domain-containing protein 80	Q76M96	14.56	0.015
Lysozyme C	P61626	10.69	0.010
Fibronectin	P02751	10.08	0.012
Chondroadherin	O15335	9.62	0.001
Aggrecan core protein	P16112	9.44	0.001
Angiogenin	P03950	9.05	0.008
Hyaluronan and proteoglycan link protein	P10915	8.49	0.011
Phospholipase A2, membrane associated	P14555	8.16	0.014
Collagen alpha-1(II)	P02458	6.84	0.020
FGF-binding protein 2	Q9BYJ0	6.58	0.000
Protein S100-A9	P06702	6.46	0.019
Glia-derived nexin	P07093	5.94	0.030
C-type lectin domain family 3A	O75596	5.35	0.000
Serine protease HTRA1	Q92743	5.02	0.023
HHIP-like protein 2	Q6UWX4	4.30	0.025
Cartilage intermediate layer protein 1	O75339	3.08	0.001
Target of Nesh-SH3	Q7Z7G0	2.06	0.015
Sushi repeat-containing protein SRPX2	O60687	1.81	0.015
Collagen alpha-2(VI)	P12110	0.33	0.041
Collagen alpha-3(VI)	P12111	0.31	0.026
Collagen alpha-1(VI)	P12109	0.29	0.042
Apolipoprotein A-I	P02647	0.23	0.033
Vitronectin	P04004	0.17	0.040
Tenascin-X	P22105	0.16	0.011
Asporin	Q9BXN1	0.12	0.018

Table 3k Rib vs tracheal cartilage

Protein name	Accession	T-test	
		Fold Change	Raw p value
Fibronectin	P02751	5.94	0.018
Cartilage intermediate layer protein 1	O75339	4.44	0.018
Augurin	Q9H1Z8	3.75	0.042
Cartilage oligomeric matrix protein	P49747	3.43	0.008
SPARC	P09486	3.25	0.034
Decorin	P07585	2.64	0.018
Extracellular superoxide dismutase [Cu-Zn]	P08294	2.38	0.032
Microfibril-associated glycoprotein 4	P55083	0.61	0.014
Collagen alpha-2(I)	P08123	0.58	0.012
Galectin-1	P09382	0.58	0.024
Mimecan	P20774	0.55	0.022
Collagen alpha-2(VI)	P12110	0.54	0.038
Collagen alpha-3(VI)	P12111	0.52	0.022
Leukocyte cell-derived chemotaxin-2	O14960	0.46	0.018
Pleckstrin homology domain-containing family A6	Q9Y2H5	0.38	0.032
Lysozyme C	P61626	0.33	0.01
Tetranectin	P05452	0.33	0.032
Hemoglobin subunit beta	P68871	0.31	0.016
Hemoglobin subunit alpha	P69905	0.31	0.036
Inter-trypsin inhibitor heavy chain H5-like protein	Q6UXX5	0.27	0.034