

## Supporting information

### A comprehensive proteomic analysis of human dentin

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**Table S1:** List of proteins detected by two-dimensional gel electrophoresis from human dentin tissue and identified by mass spectrometry. The symbols of the proteins were searched for in the HGNC database cross-referenced at <http://www.ebi.ac.uk/IPI>. +, proteins not identified in human dentin before. §, proteins not identified in human tissues before. <sup>a</sup>Proteins also identified by SDS-PAGE. <sup>b</sup>Proteins only identified by SDS-PAGE. <sup>c</sup>Proteins appear in descending order of their MASCOT score.

**Table S2:** List of keratins and other possible contaminants detected by two-dimensional gel electrophoresis from human dentin tissue and identified by mass spectrometry. <sup>a</sup>Proteins also identified by SDS-PAGE. <sup>b</sup>Proteins appear in descending order of their MASCOT score.

**Table S1**

Accession IPI/SwissProt	Symbol	Protein name <sup>a),b)</sup>	G/E- extract and/or pellet	Protein MASCOT score <sup>c)</sup>	No. of peptides	Sequence coverage (%)	MW (teor.)	pI (teor.)
IPI00297646	COL1A1	Collagen alpha-1(I) chain precursor <sup>a)</sup>	G, E, P	14531	307	75	138.9	5.5
IPI00304962	COL1A2	Collagen alpha-2(I) chain precursor <sup>a)</sup>	G, E, P	10497	209	76	129.2	9.7
IPI00745872	ALB	Isoform 1 of Serum albumin precursor <sup>a)</sup>	G, E, P	9990	92	85	69.3	5.9
IPI00953689	AHSG	Alpha-2-HS-glycoprotein <sup>a)</sup>	G, E, P	6104	102	72	312.0	4.7
IPI00019568	F2	Prothrombin precursor (Fragment) <sup>a)</sup>	G, E, P	5743	58	60	70.0	5.6
IPI00418471	VIM	Vimentin <sup>a)</sup>	G, E, P	3462	68	80	53.6	4.9
IPI00006114	SERPINF1	Pigment epithelium-derived factor <sup>a)</sup>	G, E, P	2845	48	80	46.3	6.0
IPI00553177	SERPINA1	Alpha-1-antitrypsin precursor <sup>a)</sup>	G, E	2173	28	64	46.7	5.3
IPI00032179	SERPINC1	Antithrombin-III <sup>a)</sup>	G, E, P	2004	33	66	52.6	6.3
IPI00020990	OMD	Osteomodulin precursor <sup>a)</sup>	G, E, P	1995	43	54	49.5	5.2
IPI00022463	TF	Serotransferrin <sup>a)</sup>	G, E	1943	37	59	77.0	7.0
IPI00298971	VTN	Vitronectin precursor <sup>a)</sup>	G, E, P	1561	33	34	54.3	5.5
IPI00010790	BGN	Biglycan precursor <sup>a)</sup>	G, E, P	1538	29	58	41.6	7.9
IPI00299738	PCOLCE	Procollagen C-endopeptidase enhancer 1 precursor <sup>a)</sup>	E	1383	28	55	47.9	8.7
IPI00021841	APOA1	Apolipoprotein A-I precursor <sup>a)</sup>	G, E	1270	23	63	30.8	5.5
IPI00019576	F10	Coagulation factor X precursor <sup>a)</sup>	E	1241	22	45	54.7	5.6
IPI00020986	LUM	Lumican precursor <sup>a)</sup>	G, E	1204	23	54	38.4	6.2
IPI00013933	DSP	Isoform DPI of Desmoplakin	G	1163	25	13	331.6	6.4
IPI00785084	IGHG1	+ IGH@ protein	G, E	1136	19	55	51.1	9.6
IPI00014572	SPARC	Secreted protein, acidic, cysteine-rich (Osteonectin), isoform CRA_a <sup>a)</sup>	E	1094	21	68	36.0	4.6
IPI00329801	ANXA5	Annexin A5 <sup>a)</sup>	G	1092	24	78	35.9	4.8
IPI00032404	MMP20	Matrix metalloproteinase-20 precursor <sup>a)</sup>	E, P	1076	20	44	54.3	9.3
IPI00412681	APP	Isoform L-APP752 of Amyloid beta A4 protein precursor (Fragment) <sup>a)</sup>	E	1073	19	30	85.0	4.6

IPI00027230	HSP90B1	Endoplasmin precursor <sup>a)</sup>	E	1034	20	28	92.4	4.6
IPI00020599	CALR	Calreticulin precursor <sup>a)</sup>	E	1017	17	61	48.1	4.1
IPI00215894	KNG1	Isoform LMW of Kininogen-1 precursor <sup>a)</sup>	G, E, P	985	19	43	47.9	6.3
IPI00654755	HBB	Hemoglobin subunit beta	G	973	17	95	16.0	6.9
IPI00219018	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase	G, E	950	16	52	36.0	9.3
IPI00555812	GC	Vitamin D-binding protein precursor <sup>b)</sup>	G, E	922	23	60	52.9	5.2
IPI00021439	ACTB	Actin, cytoplasmic 1 <sup>a)</sup>	G, E	909	33	65	41.7	5.2
IPI00022488	HPX	Hemopexin precursor <sup>a)</sup>	G, E	880	19	39	51.6	6.6
IPI00296099	THBS1	Thrombospondin-1 precursor <sup>a)</sup>	G, E	865	17	20	129.3	4.6
IPI00022429	ORM1	+ Alpha-1-acid glycoprotein 1 <sup>a)</sup>	G, E	850	20	49	23.5	4.8
IPI00021263	YWHAZ	14-3-3 protein zeta/delta <sup>a)</sup>	G	802	17	57	27.7	4.6
IPI00893705	COL11A2	Collagen, type XI, alpha 2	G, E	791	12	12	159.2	7.9
IPI00306339	SPP1	Secreted phosphoprotein 1 isoform b <sup>a)</sup>	G, E	788	12	40	33.8	4.2
IPI00908685	PROC	cDNA FLJ51925, highly similar to Vitamin K-dependent protein C <sup>a)</sup>	E	771	15	40	57.5	6.3
IPI00872967	DSPP	Dentin sialophosphoprotein <sup>a)</sup>	E	768	11	7	131.1	3.4
IPI00384938	IGHG1	+ , § Hypothetical protein DKFZp686N02209	G	766	13	32	52.8	9.5
IPI00296176	F9	Coagulation factor IX <sup>a)</sup>	E	745	12	29	51.7	5.2
IGHG1_HUMAN	IGHG1	+ Ig gamma-1 chain C region	G, E	713	11	42	36.1	9.4
IPI00022895	A1BG	Alpha-1B-glycoprotein precursor	G	704	15	40	54.2	5.5
IPI00000075	TGFB1	Transforming growth factor beta-1 <sup>a)</sup>	E	698	17	43	44.3	9.7
IPI00647188	HYDIN	+ Hydrocephalus inducing isoform a	E	697	9	6	575.5	5.7
IPI00022432	TTR	Transthyretin precursor <sup>a)</sup>	G, E	675	11	69	15.9	5.4
IPI00303476	ATP5B	ATP synthase subunit beta, mitochondrial	G	665	15	32	56.5	5.1
IPI00018146	YWHAQ	+ 14-3-3 protein theta	G	658	8	51	27.7	4.5
IPI00465248	ENO1	Isoform alpha-enolase of Alpha-enolase	G	657	18	47	47.1	7.7
IPI00020091	ORM2	+ Alpha-1-acid glycoprotein 2 precursor	G	651	10	48	23.6	4.9
IPI00029236	IGFBP5	Insulin-like growth factor-binding protein 5 precursor <sup>a)</sup>	G	646	13	52	30.5	9.8
IPI00010779	TPM4	Isoform 1 of Tropomyosin alpha-4 chain	G	643	10	44	28.5	4.5
IPI00783987	C3	Complement C3 precursor (Fragment)	G	598	11	11	187.0	6.0
IPI00000816	YWHAE	14-3-3 protein epsilon <sup>a)</sup>	G	593	12	66	29.2	4.5
IPI00473011	HBD	Hemoglobin subunit delta	G	593	5	78	16.0	9.1

IPI00647556	GSN	Gelsolin isoform c		G, E	582	9	29	81.9	5.5
IPI00007199	SERPINA10	Protein Z-dependent protease inhibitor precursor <sup>a)</sup>		E	579	10	25	55.1	7.9
IPI00014592	CHAD	Chondroadherin precursor <sup>a)</sup>		E	578	11	44	40.5	10.3
IPI00410714	HBA1	Hemoglobin subunit alpha <sup>a)</sup>		G	576	14	75	15.2	9.4
IPI00847635	SERPINA3	Isoform 1 of Alpha-1-antichymotrypsin		G	573	14	43	47.6	5.2
IPI00304273	APOA4	Apolipoprotein A-IV precursor		E	570	13	32	45.4	5.2
IPI00008603	ACTA2	Actin, aortic smooth muscle		G	565	3	36	42.0	5.1
IPI00829683	FGFR1	Fibroblast growth factor receptor 1 isoform 9 precursor		E	558	8	18	87.4	5.6
IPI00010796	P4HB	Protein disulfide-isomerase precursor		G	553	11	31	57.1	4.6
IPI00973174	IGHG3	+ Ig gamma-3 chain C region		G, E	552	5	39	47.5	6.5
IPI00477649	TPM3	Tropomyosin 3 isoform 5		G	551	13	34	28.8	4.6
IPI00739099	COL5A2	Collagen alpha-2(V) chain		G, P	511	14	18	144.8	6.0
IPI00645452	TUBB	Tubulin, beta		G	501	12	37	47.7	4.6
IPI00000874	PRDX1	Peroxiredoxin-1		G	499	13	60	22.1	9.2
IPI00641231	POSTN	Periostin, osteoblast specific factor <sup>a)</sup>		E	499	8	26	90.1	8.9
IPI00423466	IGHG1	+ § Hypothetical protein DKFZp686H20196		G	497	8	21	52.7	9.6
IPI00022395	C9	Complement component C9 precursor <sup>a)</sup>		E	487	7	15	63.1	5.3
IPI00017601	CP	Ceruloplasmin precursor		G	485	9	15	122.1	5.4
IPI00936892	COL2A1	+ Isoform 2 of Collagen alpha-1(II) chain <sup>b)</sup>		P	484	13	3	141.7	6.6
IPI00291262	CLU	Clusterin precursor		G, E	477	9	30	52.5	5.9
IPI00027843	PROZ	+ Isoform 1 of Vitamin K-dependent protein Z		E	474	10	29	44.7	5.6
IPI00033466	CLEC11A	C-type lectin domain family 11 member A <sup>a)</sup>		G, E	465	10	37	35.7	4.9
IPI00514204	LMNA	Lamin A/C		G	461	10	25	53.2	6.1
IPI00220361	CALB1	Calbindin		G	454	11	45	30.0	4.6
IPI00024284	HSPG2	Basement membrane-specific heparan sulfate proteoglycan core protein		E	452	6	6	468.5	6.1
IPI00399007	IGHG2	+ § Hypothetical protein DKFZp686I04196 (Fragment) <sup>a)</sup>		G, E	452	3	24	46.0	8.6
IPI00027827	SOD3	Extracellular superoxide dismutase [Cu-Zn] precursor <sup>a)</sup>		E	450	7	27	25.8	6.2
IPI00384369	TPM1	Tropomyosin 1 alpha variant 6		G	438	4	31	28.7	4.6
IPI00216318	YWHAB	Isoform Long of 14-3-3 protein beta/alpha		G	437	3	32	28.1	4.6
IPI00169383	PGK1	Phosphoglycerate kinase 1		G	430	12	40	44.6	9.2

IPI00419585	PPIA		Peptidyl-prolyl cis-trans isomerase A	G	427	10	61	18.0	9.0
IPI00942033	ODZ1	+	Teneurin-1	E	427	6	4	304.8	6.0
IPI00166729	AZGP1		Alpha-2-glycoprotein 1, zinc precursor	G	423	12	44	34.2	5.7
IPI00003865	HSPA8		Isoform 1 of Heat shock cognate 71 kDa protein	G	419	10	17	70.9	5.2
IPI00844287	NES		Similar to Nestin <sup>a)</sup>	E	417	8	18	65.8	5.1
IPI00412264	PTN		Pleiotrophin precursor	E	411	9	54	18.9	10.6
IPI00027462	S100A9		Protein S100-A9	G	410	7	68	13.2	5.7
IPI00844090	COL5A1		Collagen alpha-1(V) chain <sup>a)</sup>	G	409	9	9	183.4	4.8
IPI00479186	PKM2		Isoform M2 of Pyruvate kinase isozymes M1/M2	G	402	10	27	57.9	9.0
IPI00025465	OGN		cDNA FLJ59205, highly similar to Mimecan <sup>a)</sup>	E	396	9	26	40.5	9.0
IPI00889156	-	+	IGKV3-20 IGK@ protein	E	395	6	43	25.8	6.2
IPI00646748	TPM2		Tropomyosin 2	G	388	9	29	32.8	4.5
IPI00012734	DMP1		Isoform 1 of Dentin matrix acidic phosphoprotein 1 precursor	E	388	8	20	55.7	3.9
IPI00218343	TUBA1C		Tubulin alpha-6 chain	G	383	9	31	49.9	4.8
IPI00009028	CLEC3B		Tetranectin <sup>a)</sup>	E	382	6	54	22.6	5.4
IPI00003362	HSPA5		HSPA5 protein	G	380	11	26	72.4	4.9
IGHG2_HUMAN	IGHG2	+	Ig gamma-2 chain C region	G	380	2	24	35.9	8.8
IPI00073196	LTBP3		Isoform 1 of Latent-transforming growth factor beta-binding protein 3 precursor	E	377	9	11	139.3	5.7
IPI00219806	S100A7	+	Protein S100-A7	G	377	8	38	11.5	6.4
IPI00180675	TUBA1A		Tubulin alpha-1A chain	G	376	9	31	50.1	4.8
IPI00784295	HSP90AA1		Heat shock protein HSP 90-alpha	G	375	8	16	84.6	4.8
IPI00021536	CALML5		Calmodulin-like protein 5	G	370	6	57	15.9	4.1
IPI00304925	HSPA1A;HSPA1B		Heat shock 70 kDa protein 1A/1B	G	361	6	18	70.0	5.4
IPI00044745	SCIN		Isoform 2 of Adseverin	G	356	9	24	65.3	9.2
IPI00003348	GNB2	+	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta 2	G	356	9	27	37.3	5.6
IPI00930688	TUBA1B	+	Tubulin alpha-1B chain	G	356	9	33	46.3	4.8
IPI00965868	TGFBI		Transforming growth factor, beta-induced, 68kDa variant (Fragment)	E	354	8	17	74.6	8.6
IPI00024621	OLFML3		Isoform 1 of Olfactomedin-like protein 3	E	349	9	24	46.0	6.2

IPI00021033	COL3A1		Isoform 1 of Collagen alpha-1(III) chain precursor	G	344	7	15	138.5	6.2
IPI00219219	LGALS1	+	Galectin-1	G, E	338	9	76	14.7	5.2
IPI00000860	FMOD		Fibromodulin	G, E	328	6	16	43.2	5.6
IPI00220216	TNC		Isoform 6 of Tenascin	G, E	327	8	8	171.2	4.8
IPI00022204	SERPINB3	+	Isoform 1 of Serpin B3	G	326	8	27	44.5	6.4
IPI00329555	F7	+	Isoform A of Coagulation factor VII	E	326	6	22	51.6	7.2
IPI00022417	LRG1		Leucine-rich alpha-2-glycoprotein precursor	G	324	7	26	38.2	6.5
IPI00218733	SOD1		Superoxide dismutase [Cu-Zn]	G	318	8	45	15.9	5.7
IPI00941125	MUC6		Mucin-6	G	317	2	9	252.2	7.3
IPI00032220	AGT		Angiotensinogen precursor	G	315	6	23	53.1	5.9
IPI00419237	LAP3	+	Isoform 1 of Cytosol aminopeptidase	G	310	9	25	56.1	9.0
IPI00298497	FGB		Fibrinogen beta chain	G	307	7	21	55.9	9.3
IPI00218918	ANXA1		Annexin A1 <sup>a)</sup>	G	306	8	35	38.7	6.7
IPI00641737	HP	+	Haptoglobin precursor	G	302	8	23	46.7	6.3
IPI00298547	PARK7	+	Protein DJ-1	G	301	9	32	19.9	6.4
IPI00550731	-	+, §	Putative uncharacterized protein <sup>a)</sup>	G	301	6	41	26.2	9.2
IPI00394820	OLFML1		Olfactomedin-like protein 1	E	299	6	19	45.9	9.1
IPI00028714	MGP		Matrix Gla-protein precursor <sup>a)</sup>	G, E	296	7	47	12.3	10.3
IPI00000760	DDAH2		NG,NG-dimethylarginine dimethylaminohydrolase 2	G	295	6	35	26.6	5.6
IPI00386879	IGHA1		CDNA FLJ14473 fis, clone MAMMA1001080, highly similar to Homo sapiens SNC73 protein (SNC73) mRNA	G	290	6	16	53.1	6.5
IPI00455315	ANXA2		Annexin A2	G	289	8	35	38.6	8.5
IPI00220642	YWHAG		14-3-3 protein gamma	G	289	4	28	28.3	4.7
IPI00784950	IGHA2	+, §	Hypothetical protein DKFZp686L19235	G	288	4	21	51.6	5.4
IPI00549725	PGAM1		Phosphoglycerate mutase 1	G	282	6	31	28.8	6.8
IPI00018305	IGFBP3		Insulin-like growth factor-binding protein 3 <sup>a)</sup>	G	278	5	25	31.7	10.2
IPI00554711	JUP		Junction plakoglobin	G	277	4	11	81.7	5.7
IPI00411765	SFN	+	Isoform 2 of 14-3-3 protein sigma	G	276	8	38	24.3	4.6
IPI00843942	CFHR5	+	Complement factor H-related protein 5	E	275	3	18	64.4	7.0
IPI00398625	HRNR		Hornerin	G	272	6	5	282.2	10.4
IPI00426051	IGHG2	+, §	Hypothetical protein DKFZp686C15213	G	271	7	16	51.1	8.9
IPI00550069	RNH1	+	Ribonuclease inhibitor	G	269	6	22	49.9	4.6

LRC4B_HUMAN	LRRC4B	+	Leucine-rich repeat-containing protein 4B	E	262	7	2	76.4	6.9
IPI00075248	CALM3		Calmodulin	G, E	262	5	31	16.8	3.9
CATD_HUMAN	CTSD		Cathepsin D	G	250	7	19	44.5	6.1
IPI00219757	GSTP1		Glutathione S-transferase P	G	250	6	31	23.3	5.3
IPI00010303	SERPINB4	+	Serpin B4	G	243	6	20	44.8	5.8
IPI00449920	IGHA1	+, §	cDNA FLJ90170 fis, clone MAMMA1000370, highly similar to Ig alpha-1 chain C region	G	243	5	13	53.2	6.1
IPI00025753	DSG1		Desmoglein-1	G	238	4	6	113.7	4.8
IPI00797270	TPI1		Isoform 1 of Triosephosphate isomerase	G	234	7	45	26.7	6.5
IPI00257508	DPYSL2		Dihydropyrimidinase-related protein 2	G	234	6	18	62.3	5.9
IPI00027350	PRDX2		Peroxiredoxin-2	G	231	4	36	21.9	5.6
IPI00219221	LGALS7	+	Galectin-7	G	230	4	52	15.1	8.0
IPI00329573	COL12A1		Isoform 1 of Collagen alpha-1(XII) chain	G, E	230	3	4	332.9	5.3
ZG16B_HUMAN	ZG16B	+	Zymogen granule protein 16 homolog B	G	226	5	28	22.7	7.6
IPI00879231	SERPINF2	+	Alpha-2-antiplasmin	G	226	5	22	54.5	5.9
IPI00555693	SPOCK3		cDNA FLJ55965, highly similar to Testican-3	E	225	6	11	50.3	4.7
IPI00784201	CEP290		Isoform 1 of Centrosomal protein of 290 kDa	E	225	3	3	290.2	5.7
STYL1_HUMAN	STYXL1	+	Serine/threonine/tyrosine-interacting-like protein 1	G, E	223	7	13	35.8	5.7
IPI00007047	S100A8		Protein S100-A8	G	221	5	40	10.8	6.6
IPI00022391	APCS		Serum amyloid P-component precursor	G, E	219	5	20	25.4	6.1
IPI00000792	CRYZ		Quinone oxidoreductase	G	218	6	36	35.2	9.2
IPI00032292	TIMP1		Metalloproteinase inhibitor 1	E	218	3	22	23.2	9.8
IPI00019038	LYZ		Lysozyme C	G, E	217	5	30	16.5	10.6
IPI00658130	IGL@		IGL@ protein	G	215	5	32	25.0	9.1
IPI00294004	PROS1		Vitamin K-dependent protein S precursor	E	214	4	7	75.1	5.4
IPI00292130	DPT		Dermatopontin	G, E	208	5	36	24.0	4.5
FSIP2_HUMAN	FSIP2	+	Fibrous sheath-interacting protein 2	E	208	2	1	780.1	6.3
IPI00010896	CLIC1		Chloride intracellular channel protein 1	G	207	6	49	26.9	4.9
NEBU_HUMAN	NEB	+	Nebulin	G	200	4	3	772.4	9.5
IPI00216694	PLS3	+	Plastin 3	G	198	5	12	70.8	5.3
IPI00453473	HIST1H4A		Histone H4	G	198	4	39	11.4	11.8
IPI00853045	IGKC	+	IGKC Anti-RhD monoclonal T125 kappa light chain	G	194	5	33	25.7	9.5
IPI00216319	YWHAH	+	14-3-3 protein eta	G	194	2	20	28.2	4.6

IPI00219930	CRABP1	Cellular retinoic acid-binding protein 1	G	187	3	58	15.6	5.1
IPI00027463	S100A6	+ Protein S100-A6	G	183	4	24	10.2	5.2
IPI00216984	CALML3	Calmodulin-like protein 3	G	181	5	42	16.9	4.1
IPI00014439	QDPR	+ Dihydropteridine reductase	G	181	5	31	25.8	7.8
IPI00220301	PRDX6	Peroxiredoxin-6	G	178	4	21	25.0	6.0
IPI00022426	AMBP	+ Protein AMBP	G	174	5	19	39.0	5.9
IPI00289862	SCRN1	+ Secernin-1	G	166	5	18	46.4	4.5
IPI00339373	GGT5	+ Isoform 2 of Gamma-glutamyltransferase 5 precursor	E	166	4	13	59.0	8.8
IPI00023015	BGLAP	Osteocalcin precursor	E	166	2	35	11.0	7.5
IPI00009123	NUCB2	Isoform 1 of Nucleobindin-2	E	159	6	12	50.2	4.9
IPI00298828	APOH	Beta-2-glycoprotein 1 precursor	G, E	159	5	25	38.3	9.5
IPI00022371	HRG	Histidine-rich glycoprotein precursor	E	158	3	9	59.5	7.2
IPI00646304	PPIB	Peptidylprolyl isomerase B precursor <sup>a)</sup>	E	157	3	23	23.7	9.9
IPI00878579	MICALL1	+ MICAL-like 1	E	156	4	3	82.4	8.6
ZNFX1_HUMAN	ZNFX1	+ NFX1-type zinc finger-containing protein 1	G	155	2	5	220.1	7.2
IPI00925547	LTF	Lactoferrin	G	154	5	7	77.9	9.6
IPI00643525	C4A	+ Complement component 4A	G	153	3	2	192.6	6.7
IPI00025512	HSPB1	Heat-shock protein beta-1	G	152	4	19	22.8	6.0
IPI00291922	PSMA5	+ Proteasome subunit alpha type-5	G	151	5	29	26.4	4.6
IPI00010333	MDK	Midkine precursor	E	151	3	32	15.6	11.0
IPI00395488	VASN	+ Vasorin	G	150	4	10	71.7	8.0
IPI00012119	DCN	Isoform A of Decorin precursor	E	148	2	15	39.7	9.5
IPI00910754	LDHA	Lactate dehydrogenase A isoform 2	G	141	2	9	30.2	6.8
IPI00177728	CNDP2	Isoform 1 of Cytosolic non-specific dipeptidase	G	140	3	12	52.8	5.6
IPI00027482	SERPINA6	+ Corticosteroid-binding globulin	G	137	4	11	45.1	5.6
IPI00019176	RARRES2	Retinoic acid receptor responder protein 2 precursor	E	136	2	22	18.6	10.5
IPI00386975	DSC1	Isoform 1B of Desmocollin-1	G	135	3	5	93.8	5.2
IPI00913924	LRRC15	Leucine rich repeat containing 15 isoform a	G	135	2	13	65.0	6.3
IPI00007702	HSPA2	Heat shock-related 70 kDa protein 2	G	134	5	8	70.0	5.4
IPI00896419	ITIH4	+ Isoform 1 of Inter-alpha-trypsin inhibitor heavy chain H4	G	131	3	4	98.3	6.2



IPI00465070	HIST1H3A	+ Histone H3.1	G	130	3	21	15.4	11.9
IPI00478115	DMBT1	Isoform 2 of Deleted in malignant brain tumors 1 protein	G	129	3	3	193.8	5.1
IPI00014048	RNASE1	+ Ribonuclease pancreatic precursor	E	128	3	28	17.6	10.2
IPI00940393	EEF1A1	Elongation factor 1-alpha	G	127	2	11	42.6	9.8
IPI00418431	ASPN	ASPN protein	G	126	3	15	43.9	6.0
IPI00025512	HSPB1	Heat-shock protein beta-1	G	126	2	15	22.8	6.0
IPI00219713	FGG	Isoform Gamma-A of Fibrinogen gamma chain	G	124	3	25	49.5	5.7
IPI00947285	SBSN	Suprabasin isoform 1 precursor	G	124	3	9	60.5	6.5
IPI00220403	HIST1H2BB	+ Histone H2B type 1-B	G	122	3	33	13.9	10.8
IPI00029997	PGLS	+ 6-phosphogluconolactonase	G	120	2	24	27.5	5.7
IPI00218414	CA2	Carbonic anhydrase 2	G	118	4	15	29.2	7.0
IPI00300376	TGM3	+ Protein-glutamine gamma-glutamyltransferase E precursor	G	117	3	9	60.5	6.5
IPI00008554	ANG	Angiogenin precursor	E	116	3	16	16.5	10.9
IPI00025084	CAPNS1	Calpain small subunit 1	G	115	2	9	28.3	4.9
IPI00965014	MAP1B	MAP1B protein	G	114	3	6	75.0	6.3
IPI00215746	FABP4	+ Fatty acid-binding protein, adipocyte	G	114	2	9	14.7	7.5
IPI00011832	SPP2	Secreted phosphoprotein 24 precursor	E	113	3	15	24.3	9.4
IPI00031086	IGFBP1	+ Insulin-like growth factor-binding protein 1	G	111	3	11	27.9	5.0
IPI00216798	MYL2	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform	G	111	2	16	18.8	4.7
IPI00550363	TAGLN2	Transgelin-2	G	110	3	22	22.4	9.3
IPI00418931	-	+ , § CDNA FLJ45139 fis, clone BRAWH3039623	E	110	2	17	15.5	10.6
IPI00010182	DBI	Isoform 1 of Acyl-CoA-binding protein	G	110	2	41	10.0	6.2
IPI00604666	CCDC34	+ Coiled-coil domain containing 34 isoform 1	G	110	1	5	43.2	7.7
IPI00180325	IGSF22	+ Immunoglobulin superfamily member 22	G	105	3	1	100.3	6.8
IPI00013885	CASP14	+ Caspase-14	G	105	2	15	27.7	5.3
IPI00791564	ENO2	Enolase	G	105	2	11	42.7	4.8
KV106_HUMAN	-	+ Ig kappa chain V-I region EU	G	99	2	16	11.8	9.2
KV305_HUMAN	-	+ Ig kappa chain V-III region WOL	G	98	2	31	11.7	9.5
IPI00021854	APOA2	+ Apolipoprotein A-II	G	96	3	51	11.2	7.1
IPI00004573	PIGR	+ Polymeric immunoglobulin receptor	G	96	1	2	83.2	5.5

UTP20_HUMAN	UTP20	+ Small subunit processome component 20 homolog	E	95	2	3	318.2	7.2
IPI00402710	-	+, § cDNA FLJ42733 fis, clone BRAWH2013871	G	95	2	9	14.0	9.8
IPI00215983	CA1	Carbonic anhydrase 1	G	92	3	20	28.9	6.7
IPI00792557	ALPK2	+ Alpha-protein kinase 2	G	91	4	2	236.9	5.0
IPI00644989	PDIA6	Isoform 1 of Protein disulfide-isomerase A6 precursor	G	91	2	10	48.1	4.8
IPI00246975	GSTM3	+ Glutathione S-transferase Mu 3	G	91	2	15	26.5	5.2
IPI00028091	ACTR3	Actin-related protein 3	G	90	3	13	47.3	5.5
IPI00219446	PEBP1	+ Phosphatidylethanolamine-binding protein 1	G	89	3	25	21.0	7.8
IPI00335168	MYL6	+ Isoform Non-muscle of Myosin light polypeptide 6	G	89	3	23	16.9	4.4
IPI00455457	-	Histone 2, H3, pseudogene 2	G	89	3	20	15.4	11.9
IPI00019755	GSTO1	+ Glutathione transferase omega-1	G	89	3	14	27.5	6.4
TM198_HUMAN	TMEM198	+ Transmembrane protein 198	G	89	2	8	39.4	11.4
IPI00018352	UCHL1	Ubiquitin carboxyl-terminal hydrolase isozyme L1	G	89	2	8	24.8	5.2
TMC2_HUMAN	TMC2	+ Transmembrane channel-like protein 2	G	88	2	5	102.5	10.1
IPI00003515	TRIP11	+ Thyroid receptor-interacting protein 11	E	88	1	2	227.4	5.1
IPI00967874	ECM2	Isoform 2 of Extracellular matrix protein 2	E	86	2	3	73.3	5.3
IPI00556459	SERPING1	+ Serine/cysteine proteinase inhibitor clade G member 1 splice variant 2 (Fragment)	G	86	2	8	37.3	8.9
IPI00009904	PDIA4	+ Protein disulfide-isomerase A4 precursor	E	85	2	6	72.9	4.8
IPI00552768	TXN	+ Thioredoxin	G	84	1	15	9.4	5.7
IPI00642897	CACNA1S	+ Calcium channel, voltage-dependent, L type, alpha 1S subunit	G	83	2	2	210.5	6.2
IPI00019943	AFM	+ Afamin precursor	G	81	3	6	69.0	5.6
HV304_HUMAN	-	+ Ig heavy chain V-III region TIL	G, E	81	2	21	12.3	0.0
IPI00003815	ARHGDI1	Rho GDP-dissociation inhibitor 1	G	80	2	13	23.2	4.9
IPI00465439	ALDOA	Fructose-bisphosphate aldolase A	G	80	2	6	39.4	9.2
IPI00004656	B2M	Beta-2-microglobulin	E	78	2	17	13.7	6.1
IPI00220482	MAP1LC3B	+ Microtubule-associated proteins 1A/1B light chain 3B precursor	G	78	1	6	14.7	9.4
IPI00028413	ITIH3	+ Isoform 1 of Inter-alpha-trypsin inhibitor heavy chain H3	G	74	2	1	99.8	5.4
IPI00024648	MEPE	Matrix extracellular phosphoglycoprotein precursor	E	73	1	2	58.4	9.2
IPI00479877	ALDH9A1	+ Aldehyde dehydrogenase 9A1	G	73	1	2	56.3	6.2

IPI00011264	CFHR1	Complement factor H-related protein 1	E	72	1	5	37.6	8.7
IPI00291764	HIST1H2AG	Histone H2A type 1	G	66	2	22	14.1	11.4
IPI00967619	FAM81B	+ FAM81B Protein	G	64	1	3	20.4	9.2
IPI00000821	MRPL16	+ 39S ribosomal protein L16, mitochondrial precursor	E	63	1	3	28.4	10.6
IPI00871686	CLASP2	+ cDNA FLJ61103, highly similar to CLIP-associating protein 2	E	62	1	2	141.2	9.4

**Table S2**

Accession IPI/SwissProt	Symbol	Protein name <sup>a)</sup>	G/E-extract and/or pellet	Protein MASCOT score <sup>b)</sup>	No. of peptides	Sequence coverage (%)	MW (teor.)	pI (teor.)
IPI00220327	KRT1	Keratin, type II cytoskeletal 1 <sup>a)</sup>	G, E, P	4180	68	69	66.0	8.8
IPI00009865	KRT10	Keratin, type I cytoskeletal 10 <sup>a)</sup>	G, E, P	3455	49	68	58.8	5.0
IPI00019359	KRT9	Keratin, type I cytoskeletal 9 <sup>a)</sup>	G, E, P	3287	51	61	62.0	5.0
IPI00021304	KRT2	Keratin, type II cytoskeletal 2 epidermal <sup>a)</sup>	G, P	3186	48	79	65.8	8.9
IPI00009867	KRT5	Keratin, type II cytoskeletal 5	G, E, P	2291	34	50	62.3	8.6
IPI00299145	KRT6C	Keratin, type II cytoskeletal 6E	G, P	2227	39	54	60.0	8.9
IPI00300725	KRT6A	Keratin, type II cytoskeletal 6A	G, E	2197	40	53	60.0	8.9
IPI00217963	KRT16	Keratin, type I cytoskeletal 16	G, E	2173	32	67	51.2	4.8
IPI00384444	KRT14	Keratin, type I cytoskeletal 14	G, E, P	2056	21	68	51.5	4.9
IPI00293665	KRT6B	Keratin, type II cytoskeletal 6B	G, P	1946	13	54	60.0	8.9
IPI00450768	KRT17	Keratin, type I cytoskeletal 17	G	1168	9	44	48.1	4.8
TITIN_HUMAN	-	Titin - Homo sapiens (Human)	G	648	9	2	3813.8	6.0
IPI00376379	KRT77	Keratin, type II cytoskeletal 1b	G	548	4	13	61.9	5.6
IPI00182655	KRT86	Keratin type II cuticular Hb6	G	426	7	20	53.5	5.4
IPI00797452	KRT4	Keratin, type II cytoskeletal 4	G	385	4	15	51.7	6.5
IPI00329306	KRT74	Keratin, type II cytoskeletal 74	G	272	3	9	57.8	8.6
FILA2_HUMAN	FLG2	Filaggrin-2	G	237	7	3	247.9	9.2
IPI00032513	KRT31	Keratin, type I cuticular Ha1	G	222	4	10	47.2	4.7
IPI00027547	DCD	Dermcidin	G, E, P	208	4	36	11.3	6.1
IPI00007797	FABP5	Fatty acid-binding protein, epidermal	G	81	2	12	15.2	7.5