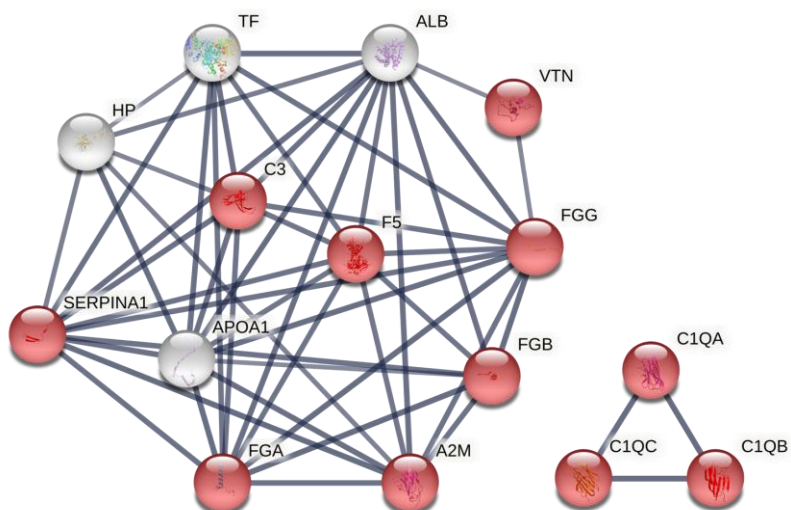
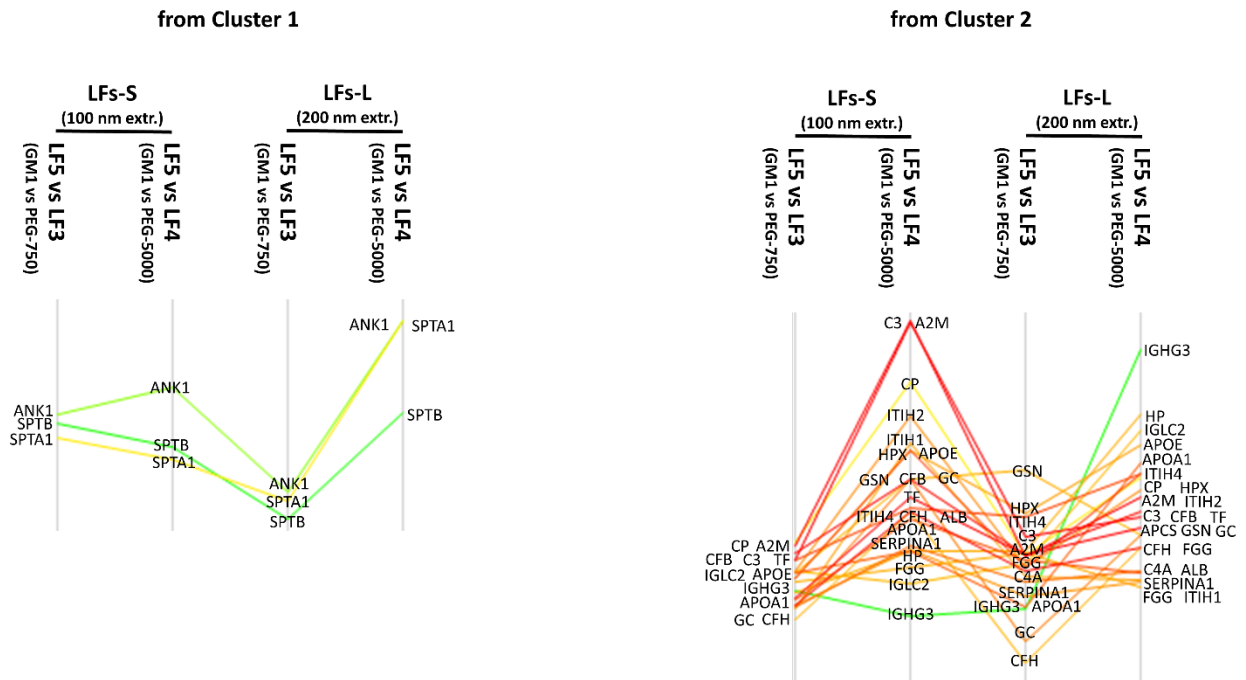


**Supplementary Figure S1. SDS-PAGE analysis of PrC.** Protein components were adsorbed on (a) LF1/2 and (b) LF3/4/5, each of them extruded at 200 and 100 nm (LFs-L and LFs-S, respectively), and then separated by SDS-PAGE 12% (v/v). Protein bands were stained with Colloid Blue Stain Reagent and identified by LC-MS/MS analysis.



**Supplementary Figure S2. STRING network analysis of PrC components identified with different relative abundance.** Red nodes correspond to proteins we identified that are involved in “complement and coagulation cascades” pathway. The networks were built by setting an interaction score of 0.7 (high-confidence) and the following sources: neighborhood, co-occurrence, co-expression, experiments and databases.





**Supplementary Figure S4. Profile plots of proteins of Cluster 1 and 2.** The profile plots shown as left inserts in Figure 4a are hereby magnificated and for each of the four points (i.e. the four binary comparisons) of the plots most of the different proteins are indicated. Only proteins with similar profiles were included in the profile plots.

**Supplementary Table 1S.** Identification of PrC components for LF1-L and LF1-S, extruded at 200 nm and 100 nm (Large and Small size, respectively).

Uniprot	Protein	Gene	MW <sup>a</sup>	Mascot Score (Peptides) LF1-S	Mascot Score (Peptides) LF1-L
P07996	Thrombospondin-1 precursor	THBS1	133291	N.D. <sup>b</sup>	274 (4)
Q14624	Inter-alpha-trypsin inhibitor heavy chain H4 isoform 1 precursor	ITIH4	103549	N.D. <sup>b</sup>	245 (4)
P19827	Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	101389	N.D. <sup>b</sup>	122 (2)
P19823	Inter-alpha-trypsin inhibitor heavy chain H2 precursor	ITIH2	103549	N.D. <sup>b</sup>	107 (2)
P11277	Spectrin beta chain, erythrocytic	SPTB	247171	N.D. <sup>b</sup>	225 (4)
P02549	Spectrin alpha chain, erythrocytic 1	SPTA1	282024	N.D. <sup>b</sup>	109 (2)
P16157	Ankyrin-1	ANK1	209476	N.D. <sup>b</sup>	102 (2)
P00450	Ceruloplasmin	CP	116197	N.D. <sup>b</sup>	101 (2)
P12259	Coagulation factor V	F5	252732	1455 (24)	2604 (41)
P01023	Alpha-2-macroglobulin	A2M	164600	242 (4)	525 (8)
P02730	Solute carrier family 4, anion exchanger, member 1	SLC4A1	102053	386 (6)	515 (9)
P01591	Immunoglobulin J chain	IGJ	18099	131 (2)	247 (4)
P02747	Complement C1q subcomponent subunit C	C1QC	25985	112 (2)	292 (5)
P04196	Histidine-rich glycoprotein precursor	HRG	60510	123 (2)	278 (4)
P04004	Vitronectin	VTN	55106	198 (3)	287 (5)
P02679	Fibrinogen gamma chain	FGG	50077	221 (4)	226 (4)
P10909	Clusterin	CLU	52495	196 (3)	222 (4)
P0DOX2	Immunoglobulin alpha-2 heavy chain	IGHA2	48934	363 (6)	342 (5)
P01860	Ig gamma-3 chain C region	IGHG3	41287	487 (8)	388 (6)
P60709	Actin, cytoplasmic 1	ACTB	42052	263 (5)	247 (4)
P00738	Haptoglobin	HP	45860	270 (5)	278 (5)
P02746	Complement C1q subcomponent subunit B	C1QB	24154	186 (3)	246 (4)
P02768	Serum albumin	ALB	68239	1120 (17)	1199 (18)
O43866	CD5 antigen-like	CD5L	39603	411 (6)	423 (6)
P02647	Apolipoprotein A-I	APOA1	30759	356 (5)	501 (7)
P02787	Serotransferrin	TF	79280	1054 (16)	681 (11)
P01009	Alpha-1-antitrypsin	SERPINA1	46848	362 (5)	322 (5)
Q15485	Ficolin-2 isoform a precursor	FCN2	34436	133 (2)	262 (4)
P01871	Immunoglobulin heavy constant mu	IGHM	49440	1057 (16)	1085 (18)
P02671	Fibrinogen alpha chain	FGA	70223	107 (2)	128 (2)
P18428	Lipopolysaccharide binding protein	LBP	53533	341 (5)	281 (5)
P02745	Complement C1q subcomponent subunit A precursor	C1QA	26285	142 (3)	101 (2)
P01024	Complement component C3	C3	114238	534 (8)	494 (9)
P01624	Immunoglobulin kappa variable 3-15	IGKV3-15	12496	107 (2)	109 (2)
A0A0C4DH29	Immunoglobulin heavy variable 1-3	IGHV1-3	13008	136 (2)	126 (2)
P01834	Immunoglobulin kappa constant	IGKC	11765	494 (7)	427 (6)
O75636	Ficolin-3	FCN3	33395	331 (5)	429 (7)
P02649	Apolipoprotein E	APOE	36302	667 (10)	594 (8)
P02675	Fibrinogen beta chain	FGB	52908	630 (10)	617 (10)
P04003	C4b-binding protein alpha chain precursor	C4BPA	69042	235 (4)	199 (3)
P02790	Hemopexin precursor, partial	HPX	52254	162 (3)	106 (2)
P02774	Serum vitamin D-binding protein precursor	GC	54612	338 (6)	166 (3)
P01011	Alpha-1-antichymotrypsin	SERPINA3	40690	131 (2)	N.D. <sup>b</sup>
P04114	Apolipoprotein B-100 precursor	APOB	516634	198 (3)	N.D. <sup>b</sup>

<sup>a</sup>Theoretical MW; <sup>b</sup>Not determined.

**Supplementary Table 2S.** Identification of PrC components for LF2-L and LF2-S, extruded at 200 nm and 100 nm (Large and Small size, respectively).

Uniprot	Protein	Gene	MW <sup>a</sup>	Mascot Score (Peptides) LF2-S	Mascot Score (Peptides) LF2-L
P11277	Spectrin beta chain, erythrocytic	SPTB	247171	N.D. <sup>b</sup>	750 (13)
P02763	Alpha-1-acid glycoprotein 1	ORM1	22868	N.D. <sup>b</sup>	159 (3)
P02746	Complement C1q subcomponent subunit B	C1QB	24154	N.D. <sup>b</sup>	172 (3)
P16157	Ankyrin-1	ANK1	209476	N.D. <sup>b</sup>	318(5)
P04196	Histidine-rich glycoprotein precursor	HRG	60510	N.D. <sup>b</sup>	224 (3)
P00450	Ceruloplasmin	CP	116197	N.D. <sup>b</sup>	250 (4)
P07996	Thrombospondin-1	THBS1	133291	N.D. <sup>b</sup>	247 (4)
O14791	Apolipoprotein L1	APOL1	42357	N.D. <sup>b</sup>	123 (2)
P04003	C4b-binding protein alpha chain	C4BPA	67033	N.D. <sup>b</sup>	144 (2)
P04217	Alpha-1-B-glycoprotein	A1BG	52479	N.D. <sup>b</sup>	110 (2)
P01591	Immunoglobulin J chain	IGJ	18099	131 (2)	235 (4)
P01871	Immunoglobulin heavy constant mu	IGHM	49440	968 (16)	1200 (19)
P04004	Vitronectin	VTN	55106	125 (2)	313 (5)
P02745	Complement C1q subcomponent subunit A	C1QA	26285	46 (1)	98 (2)
P01876	Ig alpha-1 chain C region	IGHA1	37655	304 (5)	313 (5)
P02647	Apolipoprotein A-I	APOA1	30759	395 (5)	351 (5)
P00751	Complement factor B	CFB	86819	135 (2)	203 (3)
P01859	Ig gamma-2 chain C region	IGHG2	35901	385 (7)	338 (6)
P02774	Vitamin D-binding protein	GC	54612	103 (2)	266 (4)
P01011	Alpha-1-antichymotrypsin	SERPINA3	40690	188 (3)	121 (2)
P0CG05	Ig lambda-2 chain C regions	IGLC2	11294	91 (2)	175 (3)
P02549	Spectrin alpha chain, erythrocytic 1	SPTA1	282024	558 (9)	585 (11)
P0C0L4	Complement C4-A	C4A	69042	256 (4)	269 (4)
P01024	Complement C3	C3	114238	474 (8)	497 (8)
P02787	Serotransferrin	TF	79280	928 (14)	723 (11)
P01023	Alpha-2-macroglobulin	A2M	164600	861 (14)	493 (8)
P19823	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	103549	311 (5)	140 (2)
Q14624	Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	103549	224 (3)	123 (2)
P01834	Immunoglobulin kappa constant	IGKG	11765	423 (6)	525 (8)
P32119	Peroxiredoxin-2	PRDX2	20209	187 (3)	196 (3)
P01009	Alpha-1-antitrypsin	SERPINA1	46848	390 (6)	413 (7)
P19827	Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	86480	413 (6)	294 (5)
P02768	Serum albumin	ALB	68239	1409 (22)	1189 (19)
P12259	Coagulation factor V	F5	252732	898 (15)	870 (15)
P02679	Fibrinogen gamma chain	FGG	50077	301 (5)	182 (3)
P02730	Band 3 anion transport protein	SLC4A1	102053	623 (10)	407 (7)
O43866	CD5 antigen-like	CD5L	39603	284 (4)	137 (2)
P60709	Actin, cytoplasmic 1	ACTB	42052	218 (4)	281 (5)
P00738	Haptoglobin	HP	45860	195 (3)	137 (2)
P02747	Complement C1q subcomponent subunit C	C1QC	25985	264 (5)	132 (2)
P02649	Apolipoprotein E	APOE	36302	493 (8)	282 (5)
P02675	Fibrinogen beta chain	FGB	52908	754 (11)	457 (7)
O75636	Ficolin-3	FCN3	33395	375 (6)	152 (3)
P04040	Catalase	CAT	51550	148 (2)	N.D. <sup>b</sup>
P10909	Clusterin	CLU	52495	119 (2)	N.D. <sup>b</sup>
P02671	Fibrinogen alpha chain	FGA	70223	103 (2)	N.D. <sup>b</sup>

P01782	Immunoglobulin heavy variable 3-9	IGHV3	12945	190 (3)	N.D. <sup>b</sup>
P02743	Serum amyloid P-component	APCS	25495	240 (4)	N.D. <sup>b</sup>
Q15485	Ficolin-2	FCN2	34436	173 (3)	N.D. <sup>b</sup>

<sup>a</sup>Theoretical MW; <sup>b</sup>Not determined.

**Supplementary Table 3S.** Identification of PrC components for LF3-L and LF3-S, extruded at 200 nm and 100 nm (Large and Small size, respectively).

Uniprot	Protein	Gene	MW <sup>a</sup>	Mascot Score (Peptides) LF3-S	Mascot Score (Peptides) LF3-L
Q15485	Ficolin-2	FCN2	34436	N.D. <sup>b</sup>	183 (3)
Q03591	Complement factor H-related protein 1	CFHR1	38766	N.D. <sup>b</sup>	201 (3)
P04196	Histidine-rich glycoprotein precursor	HRG	60510	N.D. <sup>b</sup>	194 (3)
P15924	Desmoplakin I	DSP	334023	N.D. <sup>b</sup>	98 (2)
P04083	Annexin A1	ANXA1	38918	N.D. <sup>b</sup>	123 (2)
P01011	Alpha-1-antichymotrypsin	SERPINA3	40690	N.D. <sup>b</sup>	114 (2)
P07900	Heat shock protein HSP 90-alpha	HSP90AA1	98652	N.D. <sup>b</sup>	132 (2)
P11277	Spectrin beta chain, erythrocytic	SPTB	247171	253 (4)	775 (13)
P07996	Thrombospondin-1	THBS1	133291	261 (5)	580 (10)
P10909	Clusterin	CLU	32628	62 (1)	116 (2)
P02747	Complement C1q subcomponent subunit C	C1QC	25985	135 (2)	265 (4)
P01591	Immunoglobulin J chain	IGJ	18099	82 (1)	135 (2)
P08603	Complement factor H	CFH	139096	77 (1)	183 (3)
P02675	Fibrinogen beta chain	FGB	52908	380 (6)	746 (11)
P02730	Band 3 anion transport protein	SLC4A1	102053	266 (5)	599 (9)
P16157	Ankyrin-1	ANK1	209476	225 (4)	443 (7)
P02647	Apolipoprotein A-I	APOA1	30759	366 (5)	352 (5)
P01023	Alpha-2-macroglobulin	A2M	164600	716 (11)	1107 (19)
P01871	Immunoglobulin heavy constant mu	IGHM	49440	1006 (16)	848 (13)
O43866	CD5 antigen-like	CD5L	39603	112 (2)	240 (4)
P02790	Hemopexin	HPX	29068	163 (3)	160 (3)
P01876	Ig alpha-1 chain C region	IGHA1	37655	236 (4)	235 (4)
P04004	Vitronectin	VTN	55106	175 (3)	177 (3)
P60709	Actin, cytoplasmic 1	ACTB	42052	54 (1)	167 (3)
P02679	Fibrinogen gamma chain	FGG	50077	294 (5)	334 (6)
P01859	Ig gamma-2 chain C	IGHG2	35901	290 (6)	229 (4)
P02549	Spectrin alpha chain, erythrocytic 1	SPTA1	282024	346 (7)	268 (4)
P01009	Alpha-1-antitrypsin	SERPINA1	46848	341 (5)	345 (5)
P02671	Fibrinogen alpha chain	FGA	70223	201 (3)	137 (2)
P02768	Serum albumin	ALB	68239	1614 (25)	1298 (30)
O75636	Ficolin-3	FCN3	33395	425 (7)	403 (6)
P00450	Ceruloplasmin	CP	116197	218 (4)	98 (2)
P01834	Immunoglobulin kappa constant	IGKC	11765	498 (7)	304 (6)
P02745	Complement C1q subcomponent subunit A	C1QA	26285	110 (2)	116 (2)
P12259	Coagulation factor V	F5	252732	755 (13)	417 (7)
P02743	Pre-serum amyloid P component	APCS	25495	130 (2)	69 (1)
P00738	Haptoglobin	HP	45860	173 (3)	128 (3)
P01024	Complement C3	C3	114238	555 (9)	388 (6)
P0CG05	Ig lambda-2 chain C regions	IGLC2	11294	160 (3)	59 (1)
P27105	Erythrocyte band 7 integral membrane protein	STOM	31860	273 (4)	158 (2)
P19827	Inter-alpha-trypsin inhibitor heavy chain H1	ITIH1	86480	233 (4)	168 (3)
P02787	Serotransferrin	TF	79280	852 (13)	439 (6)
P19823	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	103549	186 (3)	53 (1)
Q14624	Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	103549	142 (2)	67 (1)
P02746	Complement C1q subcomponent subunit B	C1QB	24154	96 (2)	72 (1)
P0C0L4	Complement component C4A	C4A	69042	214 (4)	68 (1)



P06396	Gelsolin	GSN	31052	103 (2)	N.D. <sup>b</sup>
P04114	Apolipoprotein B-100	APOB	490939	159 (3)	59 (1)

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<sup>a</sup>Theoretical MW; <sup>b</sup>Not determined.

**Supplementary Table 4S.** Identification of PrC components for LF4-L and LF4-S, extruded at 200 nm and 100 nm (Large and Small size, respectively).

Uniprot	Protein	Gene	MW <sup>a</sup>	Mascot Score (Peptides) LF4-S	Mascot Score (Peptides) LF4-L
A0A0C4DH42	Immunoglobulin heavy variable 3-66	IGHV3-66	12698	62 (1)	125 (2)
P04196	Histidine-rich glycoprotein	HRG	60510	N.D. <sup>d</sup>	129 (2)
P01024	Complement component C3	C3	114238	N.D. <sup>b</sup>	95 (2)
P01023	Alpha-2-macroglobulin precursor	A2M	164600	N.D. <sup>b</sup>	99 (2)
P02671	Fibrinogen alpha chain	FGA	70223	153 (2)	259 (4)
A0A0A0MRZ8	Immunoglobulin kappa variable 3D-11	IGKV3D-11	12625	71 (1)	95 (2)
P01619	Immunoglobulin kappa variable 3-20	IGKV3-20	12557	152 (2)	139 (2)
P02675	Fibrinogen beta chain	FGB	52908	681 (11)	412 (7)
P02768	Serum albumin	ALB	68239	1175 (18)	1153 (18)
P01871	Immunoglobulin heavy constant mu	IGHM	49440	803 (12)	900 (15)
P01009	Alpha-1-antitrypsin	SERPINA1	46848	258 (4)	139 (2)
P02679	Fibrinogen gamma chain	FGG	50077	157 (3)	120 (2)
P01834	Immunoglobulin kappa constant	IGKC	11765	355 (5)	316 (5)
P04004	Vitronectin	VTN	88853069	191 (3)	143 (2)
P02747	Complement C1q subcomponent subunit C	C1QC	25985	236 (4)	104 (2)
O75636	Ficolin-3	FCN3	33395	484 (8)	334 (5)
O43866	CD5 antigen-like	CD5L	39603	342 (5)	145 (3)
P01876	Ig alpha-1 chain C region	IGHA1	37655	260 (4)	206 (3)
P12259	Coagulation factor V	F5	252732	929 (16)	698 (12)
P01859	Ig gamma-2 chain C region	IGHG2	35901	393 (7)	375 (7)
P02730	Band 3 anion transport protein	SLC4A1	102053	410 (6)	171 (3)
P02745	Complement C1q subcomponent subunit A	C1QA	26285	113 (2)	60 (1)
P0CG05	Ig lambda-2 chain C regions	IGLC2	11294	103 (2)	52 (1)
P32119	Peroxiredoxin-2	PRDX2	20209	112 (2)	N.D. <sup>b</sup>
P02647	Apolipoprotein A-I	APOA1	30759	262 (3)	N.D. <sup>b</sup>
P07996	Thrombospondin-1	THBS1	133291	332 (6)	N.D. <sup>b</sup>
P16157	Ankyrin 1	ANK1	209476	184 (3)	N.D. <sup>b</sup>
P02746	Complement C1q subcomponent subunit B	C1QB	24154	225 (3)	70 (1)
P27105	Erythrocyte band 7 integral membrane protein	STOM	31860	747 (4)	N.D. <sup>b</sup>
P60709	Actin, cytoplasmic 1	ACTB	42052	151 (3)	N.D. <sup>b</sup>
P02549	Spectrin alpha chain, erythrocytic 1	SPTA1	282024	343 (6)	N.D. <sup>b</sup>
P11277	Spectrin beta chain, erythrocytic	SPTB	247171	509 (8)	N.D. <sup>b</sup>

<sup>a</sup>Theoretical MW; <sup>b</sup>Not determined.

**Supplementary Table 5S.** Identification of PrC components for LF5-L and LF5-S, extruded at 200 nm and 100 nm (Large and Small size, respectively).

Uniprot	Protein	Gene	MW <sup>a</sup>	Mascot Score (Peptides) LF5-S	Mascot Score (Peptides) LF5-L
P06310	Immunoglobulin kappa variable 2-30	IGKV2-30	13185	N.D. <sup>b</sup>	123 (2)
A0A0B4J1Y9	Immunoglobulin heavy variable 3-72	IGHV3-72	13203	N.D. <sup>b</sup>	117 (2)
P04196	Histidine-rich glycoprotein	HRG	60510	N.D. <sup>b</sup>	198 (3)
P02730	Band 3 anion transport protein	SLC4A1	102053	N.D. <sup>b</sup>	178 (3)
P01619	Immunoglobulin kappa variable 3-20	IGKV3-20	12557	N.D. <sup>b</sup>	174 (2)
P02671	Fibrinogen alpha chain	FGA	70223	N.D. <sup>b</sup>	177 (3)
P07996	Thrombospondin-1 precursor	THBS1	133291	N.D. <sup>b</sup>	154 (3)
P05155	Plasma protease C1 inhibitor precursor	SERPING1	55375	N.D. <sup>b</sup>	110 (2)
P12259	Coagulation factor V	F5	252732	312 (5)	1171 (21)
P02765	Alpha-2-HS-glycoprotein	AHSG	39341	N.D. <sup>b</sup>	104 (2)
P08603	Complement factor H	CFH	143694	N.D. <sup>b</sup>	104 (2)
P00738	Haptoglobin	HP	45860	293 (5)	363 (6)
P02649	Apolipoprotein E	APOE	36302	233 (4)	401 (6)
P02679	Fibrinogen gamma chain	FGG	50077	309 (5)	294 (5)
P01859	Ig gamma-2 chain C region	IGHG2	35901	288 (5)	327 (6)
P02790	Hemopexin	HPX	52254	181 (3)	270 (5)
P01871	Immunoglobulin heavy constant mu	IGHM	49440	691 (12)	756 (13)
P02768	Serum albumin	ALB	68239	1147 (18)	1235 (21)
P01023	Alpha-2-macroglobulin	A2M	164600	1430 (24)	1516 (25)
P04004	Vitronectin	VTN	55106	129 (2)	179 (3)
P02787	Serotransferrin	TF	79280	598 (9)	1107 (16)
P25311	Zinc-alpha2-glycoprotein	AZGP1	34079	103 (2)	166 (3)
P00751	Complement factor B	CFB	86819	124 (2)	193 (3)
O43866	CD5 antigen-like	CD5L	39603	97 (2)	114 (2)
P19827	Inter-alpha-trypsin inhibitor heavy chain ITIH1	ITIH1	101795	279 (4)	420 (6)
P0C0L4	Complement component C4A	C4A	69042	136 (2)	285 (5)
P02675	Fibrinogen beta chain	FGB	52908	443 (7)	734 (12)
P02743	Serum amyloid P-component	APCS	25495	47 (1)	110 (2)
O75636	Ficolin-3	FCN3	33395	448 (6)	439 (7)
Q14624	Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	103549	341 (5)	255 (4)
P02746	Complement C1q subcomponent subunit B	C1QB	24154	165 (3)	140 (2)
P0CG05	Ig lambda-2 chain C regions	IGLC2	11294	163 (3)	181 (3)
P01009	Alpha-1-antitrypsin	SERPINA1	46848	503 (7)	566 (9)
P19823	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	103549	133 (2)	250 (4)
P02747	Complement C1q subcomponent subunit C	C1QC	25985	111 (2)	123 (2)
P01834	Immunoglobulin kappa constant	IGKC	11765	341 (5)	384 (5)
P06396	Gelsolin	GSN	86043	124 (2)	100 (2)
P01011	Alpha-1-antichymotrypsin	SERPINA3	40690	157 (2)	139 (2)
P01024	Complement C3	C3	114238	676 (10)	889 (15)
P02647	Apolipoprotein A-I	APOA1	30759	332 (4)	354 (5)
P00450	Ceruloplasmin	CP	116197	594 (10)	384 (6)
P01876	Ig alpha-1 chain C region	IGHA1	37655	226 (4)	121 (2)
Q15485	Ficolin-2	FCN2	34436	325 (5)	144 (2)
P06727	Apolipoprotein A-IV	APOA4	45353	109 (2)	N.D. <sup>b</sup>

<sup>a</sup> Theoretical MW; <sup>b</sup> Not determine.

**Supplementary Table 6S.** Quantitative proteomic analysis of PrC components for all LFs at 200 nm extrusion size.

Gene	Rsc (LF2 vs LF1)	Rsc (LF3 vs LF1)	Rsc (LF3 vs LF2)	Rsc (LF4 vs LF1)	Rsc (LF4 vs LF2)	Rsc (LF4 vs LF3)	Rsc (LF5 vs LF1)	Rsc (LF5 vs LF2)	Rsc (LF5 vs LF3)	Rsc (LF5 vs LF4)
AHSG	-3,36	-3,17	0,19	-1,48	1,88	1,69	0,77	4,13	3,93	2,24
FCN2	-4,32	-0,42	3,90	-2,44	1,88	-2,01	-0,58	3,74	-0,16	1,85
SERPING1	0,73	0,92	0,19	2,61	1,88	1,69	4,23	3,50	3,30	1,61
AZGP1	0,73	0,92	0,19	2,61	1,88	1,69	3,94	3,21	3,01	1,32
APCS	0,73	3,25	2,52	2,61	1,88	-0,63	3,94	3,21	0,69	1,32
IGKV3-20	0,73	0,92	0,19	6,09	5,36	5,16	3,94	3,21	3,01	-2,15
IGKV3-15	-2,44	0,92	3,37	2,62	5,06	1,70	0,77	3,21	-0,16	-1,86
IGKV3D-11	0,73	0,92	0,19	5,79	5,06	4,87	3,57	2,84	2,65	-2,22
FGA	-1,75	0,69	2,44	1,74	3,49	1,05	0,34	2,09	-0,35	-1,40
FCN3	-1,95	-0,58	1,37	0,84	2,78	1,41	-0,15	1,79	0,42	-0,99
FGG	-0,12	0,44	0,56	1,30	1,42	0,86	1,58	1,70	1,14	0,28
HP	-0,70	-0,25	0,45	-3,78	-3,08	-3,53	0,94	1,64	1,19	4,72
IGKV2-30	-0,01	-2,99	-2,98	-1,30	-1,29	1,69	1,11	1,11	4,10	2,40
C1QB	-1,72	-0,55	1,17	-1,02	0,70	-0,47	-0,65	1,07	-0,10	0,37
FGB	-0,45	0,82	1,27	1,91	2,36	1,09	0,62	1,07	-0,20	-1,29
IGKC	-0,20	0,22	0,41	1,88	2,07	1,66	0,81	1,00	0,59	-1,07
A2M	1,47	1,38	-0,09	-0,16	-1,63	-1,53	2,45	0,98	1,08	2,61
ALB	0,36	0,82	0,46	0,54	0,18	-0,28	1,23	0,88	0,41	0,69
C4A	0,16	0,02	-0,14	0,36	0,20	0,34	1,02	0,86	1,00	0,66
HPX	0,89	0,93	0,03	-1,48	-2,37	-2,40	1,73	0,83	0,80	3,20
TF	0,35	-0,21	-0,57	-0,91	-1,27	-0,70	0,89	0,54	1,10	1,80
C3	1,02	-0,03	-1,05	-0,56	-1,58	-0,53	1,54	0,52	1,57	2,10
IGHV3-72	0,73	-2,99	-3,72	-1,30	-2,03	1,69	1,25	0,52	4,24	2,55
IGLC2	0,10	-0,25	-0,35	-3,71	-3,81	-3,45	0,62	0,52	0,87	4,32
CFH	3,54	5,58	2,04	2,61	-0,93	-2,96	3,94	0,40	-1,64	1,32
C4BPA	-0,55	-0,36	0,19	-1,48	-0,93	-1,12	-0,15	0,40	0,20	1,32
APOE	-0,58	-2,43	-1,85	-4,20	-3,62	-1,77	-0,25	0,33	2,18	3,95
ITIH4	0,13	-1,63	-1,76	-2,75	-2,88	-1,12	0,45	0,32	2,09	3,20
GSN	-0,01	-2,99	-2,98	-1,30	-1,29	1,69	0,32	0,32	3,30	1,61
SERPINA1	0,21	0,30	0,09	-0,10	-0,30	-0,40	0,34	0,13	0,04	0,43
ITIH2	0,62	-0,13	-0,75	-2,15	-2,77	-2,01	0,66	0,03	0,79	2,80
ANXA1	0,73	4,39	3,66	2,61	1,88	-1,77	0,76	0,03	-3,62	-1,85
HSP90AA1	0,73	5,32	4,59	2,61	1,88	-2,71	0,76	0,03	-4,56	-1,85
IGHV1-3	-2,73	-2,54	0,19	-0,85	1,88	1,69	-2,70	0,03	-0,16	-1,85
APOA4	-2,97	-2,78	0,19	-1,09	1,88	1,69	-2,94	0,03	-0,16	-1,85
STOM	-3,18	0,19	3,37	-1,30	1,88	-1,48	-3,15	0,03	-3,33	-1,85
CFHR1	-3,18	1,11	4,29	-1,30	1,88	-2,40	-3,15	0,03	-4,25	-1,85
JUP	-3,80	-0,14	3,66	-1,91	1,88	-1,77	-3,76	0,03	-3,62	-1,85
LBP	-4,03	-3,84	0,19	-2,15	1,88	1,69	-4,00	0,03	-0,16	-1,85
DSP	-4,23	1,26	5,49	-2,35	1,88	-3,61	-4,20	0,03	-5,46	-1,85
CP	1,70	0,54	-1,16	-1,48	-3,17	-2,01	1,64	-0,06	1,10	3,11
IGHG3	0,02	0,03	0,01	-6,61	-6,63	-6,64	-0,21	-0,24	-0,25	6,40
APOA1	-0,43	-0,44	0,00	-4,12	-3,69	-3,68	-0,67	-0,24	-0,23	3,45
C1QA	-0,30	0,12	0,43	0,77	1,07	0,64	-0,55	-0,24	-0,67	-1,31
SERPINA3	0,73	1,37	0,64	-0,85	-1,58	-2,22	0,48	-0,26	-0,90	1,32
CFB	5,13	3,73	-1,40	2,61	-2,52	-1,12	4,86	-0,27	1,12	2,24
C1QC	-0,38	0,38	0,76	0,61	0,99	0,23	-0,69	-0,32	-1,07	-1,30
CD5L	-0,87	-1,10	-0,24	-0,01	0,86	1,09	-1,26	-0,40	-0,16	-1,25
ORM1	2,45	-1,89	-4,34	-0,19	-2,65	1,69	2,05	-0,40	3,93	2,24
ITIH1	1,34	0,31	-1,04	0,41	-0,93	0,11	0,89	-0,46	0,58	0,47
APOL1	1,26	-2,25	-3,51	-0,56	-1,82	1,69	0,77	-0,50	3,01	1,32
IGHG2	0,29	-0,24	-0,53	0,37	0,08	0,60	-0,29	-0,58	-0,05	-0,66
ACTB	-0,78	-0,03	0,74	-4,03	-3,26	-4,00	-1,49	-0,71	-1,45	2,55
HRG	1,22	1,27	0,05	1,52	0,30	0,25	0,32	-0,90	-0,95	-1,20
F5	-1,34	-2,86	-1,52	-1,39	-0,05	1,47	-2,36	-1,02	0,50	-0,97
IGJ	0,73	-0,24	-0,97	1,22	0,49	1,46	-0,40	-1,13	-0,16	-1,62
THBS1	0,43	2,07	1,64	0,59	0,16	-1,48	-0,72	-1,15	-2,80	-1,31
GC	0,73	0,67	-0,06	-2,03	-2,77	-2,71	-0,42	-1,16	-1,10	1,61
VTN	-0,13	-0,81	-0,67	-0,16	-0,03	0,64	-1,33	-1,20	-0,52	-1,17
IGHA2	-0,26	-1,05	-0,79	0,15	0,41	1,20	-1,88	-1,62	-0,83	-2,03
IGHA1	-0,47	-1,36	-0,89	-0,12	0,35	1,24	-2,13	-1,66	-0,77	-2,01
IGHM	0,49	-0,25	-0,73	0,92	0,43	1,17	-1,19	-1,67	-0,94	-2,11
SLC4A1	0,35	1,13	0,78	0,46	0,10	-0,67	-1,54	-1,90	-2,68	-2,00
A1BG	3,90	0,92	-2,98	2,61	-1,29	1,69	0,76	-3,14	-0,16	-1,85
CLU	-0,67	1,20	1,87	-2,25	-1,58	-3,45	-4,10	-3,43	-5,30	-1,85

PRDX2	0,34	0,01	-0,34	-1,48	-1,82	-1,48	-3,33	-3,67	-3,33	-1,85
ANK1	0,84	2,21	1,37	-2,15	-2,98	-4,36	-4,00	-4,83	-6,21	-1,85
SPTA1	1,18	1,54	0,36	-3,07	-4,25	-4,61	-4,92	-6,10	-6,46	-1,85
SPTB	1,54	2,34	0,80	-0,42	-1,96	-2,76	-4,60	-6,14	-6,94	-4,18
APOB	0,88	-0,86	-1,75	-3,71	-4,59	-2,84	-5,56	-6,44	-4,69	-1,85

Proteins in grey with  $Rsc \geq 1.40$  or  $\leq -1.40$  were considered differentially represented.

**Supplementary Table 7S.** Quantitative proteomic analysis of PrC components for all LFs at 100 nm extrusion size.

Gene	Rsc (LF2 vs LF1)	Rsc (LF3 vs LF1)	Rsc (LF3 vs LF2)	Rsc (LF4 vs LF1)	Rsc (LF4 vs LF2)	Rsc (LF4 vs LF3)	Rsc (LF5 vs LF1)	Rsc (LF5 vs LF2)	Rsc (LF5 vs LF3)	Rsc (LF5 vs LF4)
APOB	-5,75	-0,20	5,55	-4,84	0,90	-4,65	-0,29	5,46	-0,09	4,55
AZGP1	0,10	0,59	0,49	1,01	0,90	0,41	4,37	4,26	3,77	3,36
CP	3,28	5,13	1,85	1,01	-2,27	-4,12	6,54	3,27	1,42	5,54
FCN2	-0,30	-4,46	-4,16	-0,34	-0,04	4,12	1,37	1,66	5,82	1,70
IGKC	-0,90	-0,33	0,58	0,22	1,12	0,54	0,55	1,46	0,88	0,34
IGLC2	-0,80	-0,24	0,56	0,06	0,85	0,29	0,45	1,24	0,68	0,39
A2M	2,51	2,25	-0,26	-3,52	-6,03	-5,77	3,62	1,11	1,37	7,14
C3	0,71	0,74	0,03	-5,39	-6,10	-6,14	1,70	0,99	0,96	7,09
APOA1	-0,78	-0,51	0,28	-1,06	-0,28	-0,55	0,16	0,94	0,66	1,22
IGKV3-20	-3,07	0,89	3,96	1,30	4,37	0,41	-2,27	0,80	-3,16	-3,57
STOM	-3,36	1,05	4,40	1,01	4,37	-0,04	-2,56	0,80	-3,61	-3,57
IGHV1-3	-3,60	-3,11	0,49	-2,70	0,90	0,41	-2,80	0,80	0,31	-0,11
C4BPA	-3,60	-0,79	2,82	-2,70	0,90	-1,91	-2,80	0,80	-2,02	-0,11
IGKV3-15	-3,81	-0,14	3,66	0,56	4,37	0,70	-3,01	0,80	-2,87	-3,57
LBP	-4,66	-4,17	0,49	-3,76	0,90	0,41	-3,86	0,80	0,31	-0,11
FGG	-0,36	-0,10	0,26	-0,43	-0,07	-0,33	0,33	0,70	0,44	0,77
FCN3	-1,16	-0,87	0,29	-0,08	1,09	0,79	-0,52	0,64	0,35	-0,45
ITIH4	1,61	1,23	-0,38	-0,13	-1,74	-1,36	2,21	0,60	0,98	2,34
SERPINA3	0,35	-2,87	-3,21	-2,45	-2,80	0,41	0,91	0,56	3,77	3,36
IGJ	-0,59	-0,63	-0,04	-0,22	0,37	0,41	-0,03	0,56	0,60	0,19
ITIH2	2,84	2,67	-0,16	-1,32	-4,15	-3,99	3,35	0,51	0,68	4,66
FGB	-0,22	-0,24	-0,02	-0,04	0,18	0,20	0,13	0,35	0,36	0,17
C1QB	-0,78	-0,34	0,44	0,90	1,68	1,24	-0,43	0,34	-0,10	-1,34
HPX	0,10	-0,10	-0,20	-3,39	-3,49	-3,29	0,42	0,31	0,52	3,81
CFB	3,81	2,92	-0,89	1,01	-2,80	-1,91	4,08	0,27	1,16	3,07
VTN	-1,44	-0,44	1,00	0,52	1,96	0,95	-1,19	0,25	-0,75	-1,71
C4A	1,14	1,37	0,22	-0,71	-1,85	-2,08	1,34	0,20	-0,02	2,06
ALB	0,74	1,16	0,42	-0,42	-1,16	-1,58	0,94	0,20	-0,22	1,36
TF	0,41	0,57	0,16	-2,00	-2,41	-2,57	0,58	0,17	0,01	2,58
HP	0,47	0,50	0,03	-0,58	-1,05	-1,08	0,63	0,17	0,14	1,22
C1QC	-0,06	0,31	0,37	0,85	0,92	0,54	0,08	0,14	-0,23	-0,78
GSN	4,02	3,41	-0,61	1,01	-3,01	-2,40	4,08	0,06	0,67	3,07
SERPINA1	0,41	0,60	0,20	-0,84	-1,25	-1,45	0,40	0,00	-0,20	1,25
IGHA1	-0,93	-1,04	-0,11	0,13	1,05	1,16	-1,09	-0,17	-0,06	-1,22
IGHG3	0,34	-0,08	-0,42	0,53	0,20	0,61	0,10	-0,24	0,18	-0,44
ITIH1	5,24	5,25	0,01	1,01	-4,24	-4,24	5,00	-0,24	-0,25	3,99
IGHG2	0,12	-0,32	-0,44	0,56	0,44	0,88	-0,16	-0,28	0,16	-0,72
CFH	3,57	3,77	0,20	1,01	-2,56	-2,76	3,23	-0,34	-0,54	2,22
CLU	-0,17	0,11	0,28	-4,13	-3,96	-4,24	-0,53	-0,36	-0,64	3,60
GC	-0,46	-0,66	-0,20	-3,96	-3,49	-3,29	-0,89	-0,43	-0,22	3,07
C1QA	-1,16	-0,14	1,02	0,08	1,25	0,23	-1,72	-0,56	-1,58	-1,81
APCS	1,00	0,60	-0,40	-1,80	-2,80	-2,40	0,42	-0,58	-0,18	2,22
FGA	-0,05	-0,79	-0,74	-0,58	-0,53	0,21	-0,69	-0,63	0,10	-0,11
IGHA2	-0,93	-1,15	-0,22	0,16	1,09	1,31	-1,63	-0,70	-0,48	-1,79
IGHM	-1,14	-1,00	0,14	0,11	1,24	1,10	-1,91	-0,77	-0,92	-2,02
CD5L	-0,74	-1,34	-0,61	0,06	0,79	1,40	-1,86	-1,12	-0,52	-1,92
APOA4	4,36	0,59	-3,76	1,01	-3,35	0,41	3,23	-1,13	2,63	2,22
APOE	-1,23	-2,88	-1,65	-6,18	-4,95	-3,29	-2,37	-1,14	0,52	3,81
ACTB	0,10	-0,44	-0,55	-0,03	-0,13	0,42	-1,07	-1,18	-0,63	-1,04
IGHV3-9	3,57	0,59	-2,97	1,01	-2,56	0,41	0,90	-2,66	0,31	-0,11
CAT	3,57	3,41	-0,16	1,01	-2,56	-2,40	0,90	-2,66	-2,50	-0,11
HRG	1,24	1,45	0,20	-1,32	-2,56	-2,76	-1,42	-2,66	-2,87	-0,11
ANK1	4,02	5,13	1,11	4,47	0,46	-0,66	0,90	-3,11	-4,23	-3,57
PRDX2	0,29	-0,51	-0,79	-0,58	-0,86	-0,07	-3,01	-3,29	-2,50	-2,43
F5	-0,19	-1,07	-0,87	-0,20	-0,01	0,86	-3,50	-3,31	-2,43	-3,30
THBS1	0,25	1,64	1,40	1,82	1,57	0,17	-3,35	-3,60	-5,00	-5,17
SPTB	5,40	5,36	-0,04	5,98	0,58	0,62	0,90	-4,50	-4,46	-5,08
SPTA1	6,70	5,74	-0,96	6,32	-0,39	0,58	0,90	-5,80	-4,84	-5,41
SLC4A1	1,74	1,25	-0,49	1,88	0,14	0,63	-4,54	-6,28	-5,79	-6,42

Proteins in grey with Rsc  $\geq 1.40$  or  $\leq -1.40$  were considered differentially represented.

**Supplementary Table 8S.** Differential proteins shared by different pairwise comparisons at the two extrusion sizes.

Pairwise comparison	Shared proteins	Gene	Rsc (100 nm)	Rsc (200 nm)
<b>LF2 versus LF1</b>	Spectrin beta chain, erythrocytic	SPTB	5,40	1,54
	Apolipoprotein A-IV	APOA4	4,36	-2,97
	Complement factor B	CFB	3,81	5,13
	Complement factor H	CFH	3,57	3,54
	Ceruloplasmin	CP	3,28	1,70
	Alpha-2-macroglobulin	A2M	2,51	1,47
	Erythrocyte band 7 integral membrane protein	STOM	-3,36	-3,18
	Immunoglobulin heavy variable 1-3	IGHV1-3	-3,60	-2,73
	Immunoglobulin kappa variable 3-15	IGKV3-15	-3,81	-2,44
	Lipopolysaccharide-binding protein	LBP	-4,66	-4,03
<b>LF3 versus LF1</b>	Spectrin alpha chain, erythrocytic 1	SPTA1	5,74	1,54
	Spectrin beta chain, erythrocytic	SPTB	5,36	2,34
	Ankyrin-1	ANK1	5,13	2,21
	Complement factor H	CFH	3,77	5,58
	Gelsolin	GSN	3,41	-2,99
	Complement factor B	CFB	2,92	3,73
	Thrombospondin-1	THBS1	1,64	2,07
	Apolipoprotein E	APOE	-2,88	-2,43
	Immunoglobulin heavy variable 1-3	IGHV1-3	-3,11	-2,54
	Lipopolysaccharide-binding protein	LBP	-4,17	-3,84
	Haptoglobin	HP	-4,63	-4,70
<b>LF3 versus LF2</b>	Apolipoprotein B-100	APOB	5,55	-1,75
	Erythrocyte band 7 integral membrane protein	STOM	4,40	3,37
	Immunoglobulin kappa variable 3-15	IGKV3-15	3,66	3,37
	Thrombospondin-1	THBS1	1,40	1,64
	Apolipoprotein E	APOE	-1,65	-1,85
	Ficolin-2	FCN2	-4,16	3,90
	Haptoglobin	HP	-4,65	-3,72
<b>LF4 versus LF1</b>	Spectrin alpha chain, erythrocytic 1	SPTA1	6,32	-3,07
	Ankyrin-1	ANK1	4,47	-2,15
	Serum amyloid P-component	APCS	-1,80	2,61
	C4b-binding protein alpha chain	C4BPA	-2,70	-1,48
	Hemopexin	HPX	-3,39	-1,48
	Lipopolysaccharide-binding protein	LBP	-3,76	-2,15
	Vitamin D-binding protein	GC	-3,96	-2,03
	Clusterin	CLU	-4,13	-2,25
	Apolipoprotein B-100	APOB	-4,84	-3,71
	Apolipoprotein E	APOE	-6,18	-4,20
<b>LF4 versus LF2</b>	Immunoglobulin kappa variable 3-15	IGKV3-15	4,37	5,06
	Erythrocyte band 7 integral membrane protein	STOM	4,37	1,88
	Immunoglobulin kappa variable 3-20	IGKV3-20	4,37	5,36
	Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	-1,74	-2,88
	Ceruloplasmin	CP	-2,27	-3,17
	Alpha-1-antichymotrypsin	SERPINA3	-2,80	-1,58
	Serum amyloid P-component	APCS	-2,80	1,88
	Complement factor B	CFB	-2,80	-2,52
	Apolipoprotein A-IV	APOA4	-3,35	1,88
	Vitamin D-binding protein	GC	-3,49	-2,77
	Hemopexin	HPX	-3,49	-2,37

	Clusterin	CLU	-3,96	-1,58
	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	-4,15	-2,77
	Apolipoprotein E	APOE	-4,95	-3,62
	Alpha-2-macroglobulin	A2M	-6,03	-1,63
	Complement C3	C3	-6,10	-1,58
<b>LF4 versus LF3</b>	Ficolin-2	FCN2	4,12	-2,01
	Gelsolin	GSN	-2,40	1,69
	Complement factor H	CFH	-2,76	-2,96
	Vitamin D-binding protein	GC	-3,29	-2,71
	Hemopexin	HPX	-3,29	-2,40
	Apolipoprotein E	APOE	-3,29	-1,77
	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	-3,99	-2,01
	Ceruloplasmin	CP	-4,12	-2,01
	Clusterin	CLU	-4,24	-3,45
	Apolipoprotein B-100	APOB	-4,65	-2,84
	Alpha-2-macroglobulin	A2M	-5,77	-1,53
<b>LF5 versus LF1</b>	Ceruloplasmin	CP	6,54	1,64
	Zinc-alpha-2-glycoprotein	AZGP1	4,37	3,94
	Complement factor B	CFB	4,08	4,86
	Alpha-2-macroglobulin	A2M	3,62	2,45
	Apolipoprotein A-IV	APOA4	3,23	-2,94
	Complement factor H	CFH	3,23	3,94
	Complement C3	C3	1,70	1,54
	Immunoglobulin alpha-2 heavy chain	GHA2	-1,63	-1,88
	Immunoglobulin kappa variable 3-20	IGKV3-20	-2,27	3,94
	Erythrocyte band 7 integral membrane protein	STOM	-2,56	-3,15
	Immunoglobulin heavy variable 1-3	IGHV1-3	-2,80	-2,70
	Peroxiredoxin-2	PRDX2	-3,01	-3,33
	Coagulation factor V	F5	-3,50	-2,36
	Lipopolysaccharide-binding protein	LBP	-3,86	-4,00
	Band 3 anion transport protein	SLC4A1	-4,54	-1,54
<b>LF5 versus LF2</b>	Apolipoprotein B-100	APOB	5,46	-6,44
	Zinc-alpha-2-glycoprotein	AZGP1	4,26	3,21
	Ficolin-2	FCN2	1,66	3,74
	Ankyrin-1	ANK1	-3,11	-4,83
	Peroxiredoxin-2	PRDX2	-3,29	-3,67
	Haptoglobin	HP	-4,34	1,42
	Spectrin beta chain, erythrocytic	SPTB	-4,50	-6,14
	Spectrin alpha chain, erythrocytic 1	SPTA1	-5,80	-6,10
	Band 3 anion transport protein	SLC4A1	-6,28	-1,90
<b>LF5 versus LF3</b>	Zinc-alpha-2-glycoprotein	AZGP1	3,77	3,01
	Immunoglobulin kappa variable 3-20	IGKV3-20	-3,16	3,01
	Peroxiredoxin-2	PRDX2	-3,33	-3,33
	Erythrocyte band 7 integral membrane protein	STOM	-3,61	-3,33
	Ankyrin-1	ANK1	-4,23	-6,21
	Spectrin beta chain, erythrocytic	SPTB	-4,46	-6,94
	Spectrin alpha chain, erythrocytic 1	SPTA1	-4,84	-6,46
	Thrombospondin-1	THBS1	-5,00	-2,80
	Band 3 anion transport protein	SLC4A1	-5,79	-2,68
<b>LF5 versus LF4</b>	Alpha-2-macroglobulin	A2M	7,14	2,61
	Complement C3	C3	7,09	2,10
	Ceruloplasmin	CP	5,54	3,11
	Inter-alpha-trypsin inhibitor heavy chain H2	ITIH2	4,66	2,80



Apolipoprotein B-100	APOB	4,55	-1,85
Hemopexin	HPX	3,81	3,20
Apolipoprotein E	APOE	3,81	3,95
Clusterin	CLU	3,60	-1,85
Complement factor B	CFB	3,07	2,24
Gelsolin	GSN	3,07	1,61
Vitamin D-binding protein	GC	3,07	1,61
Serotransferrin	TF	2,58	1,80
Inter-alpha-trypsin inhibitor heavy chain H4	ITIH4	2,34	3,20
Apolipoprotein A-IV	APOA4	2,22	-1,85
Ficolin-2	FCN2	1,70	1,85
Immunoglobulin alpha-2 heavy chain	IGHA2	-1,79	-2,03
Immunoglobulin heavy constant mu	IGHM	-2,02	-2,11
Peroxiredoxin-2	PRDX2	-2,43	-1,85
Immunoglobulin kappa variable 3-15	IGKV3-15	-3,57	-1,86
Ankyrin-1	ANK1	-3,57	-1,85
Erythrocyte band 7 integral membrane protein	STOM	-3,57	-1,85
Immunoglobulin kappa variable 3-20	IGKV3-20	-3,57	-2,15
Spectrin beta chain, erythrocytic	SPTB	-5,08	-4,18
Spectrin alpha chain, erythrocytic 1	SPTA1	-5,41	-1,85
Band 3 anion transport protein	SLC4A1	-6,42	-2,00

Proteins in grey had opposite expression levels in the corona of pairwise comparison groups at the two different extrusion sizes.