

Supplementary information

Reduced collagen degradation in pelvic urine precedes kidney fibrosis induced by unilateral ureteral obstruction

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Figure S1. Study work flow.

Figure S2 Representative pictures of the influence of UUO on Sirius red staining (A), and immune-labelling of COL1A1 and COL3A1 proteins (B).

Figure S3. Distribution of Col1a1-derived peptides along Col1a1-protein sequence. CTSK (cathepsin K), MMP (matrix metalloproteinase).

Figure S4. Distribution of Col1a2- and Col3a1-derived peptides along their parental protein sequence. CTSK (cathepsin K), MMP (matrix metalloproteinase).

Figure S5. Proportion of significant CDP subtypes (Col1a1-, Col2a1, Col3a1, other-CDPs) up- and down-regulated by UUO-pelvis 3D (A), UUO-pelvis 7D (B) and UUO-bladder 7D (C), compared to sham-bladder.

Figure S6. Distribution of up- and down-regulated urinary Col1a2-DPs along Col1a2 protein sequence in UUO-pelvis 7D and UUO-bladder at 7D

Figure S7. Distribution of up- and down-regulated urinary Col3a1-DPs along Col3a1 protein sequence in UUO-pelvis 7D and UUO-bladder at 7D

Figure S8. Spearman correlation matrices of abundance of Col1a1-derived peptides (Col1a1-DPs) from cluster 800 in UUO-pelvis 7D and UUO-bladder 7D. Values of r and P values are reported in Table S3.

Table S1 (Table S1.xls). Worksheet 1: MS-based relative abundance values of the peptides in each sample. Worksheets 2 to 5 (Group comparisons: Wilcoxon test for non-paired analyses of the peptides exhibiting a frequency of detection $\geq 60\%$ in at least one group). (

Table S2 . Number of significant up- and down-regulated non-CDPs in pelvic and bladder urine.

Table S3 (Table S2.xls). Spearman correlation (r and P value) of urinary of Col1a1-DPs (cluster 800) from UUO-pelvis 7D and UUO-bladder 7D.

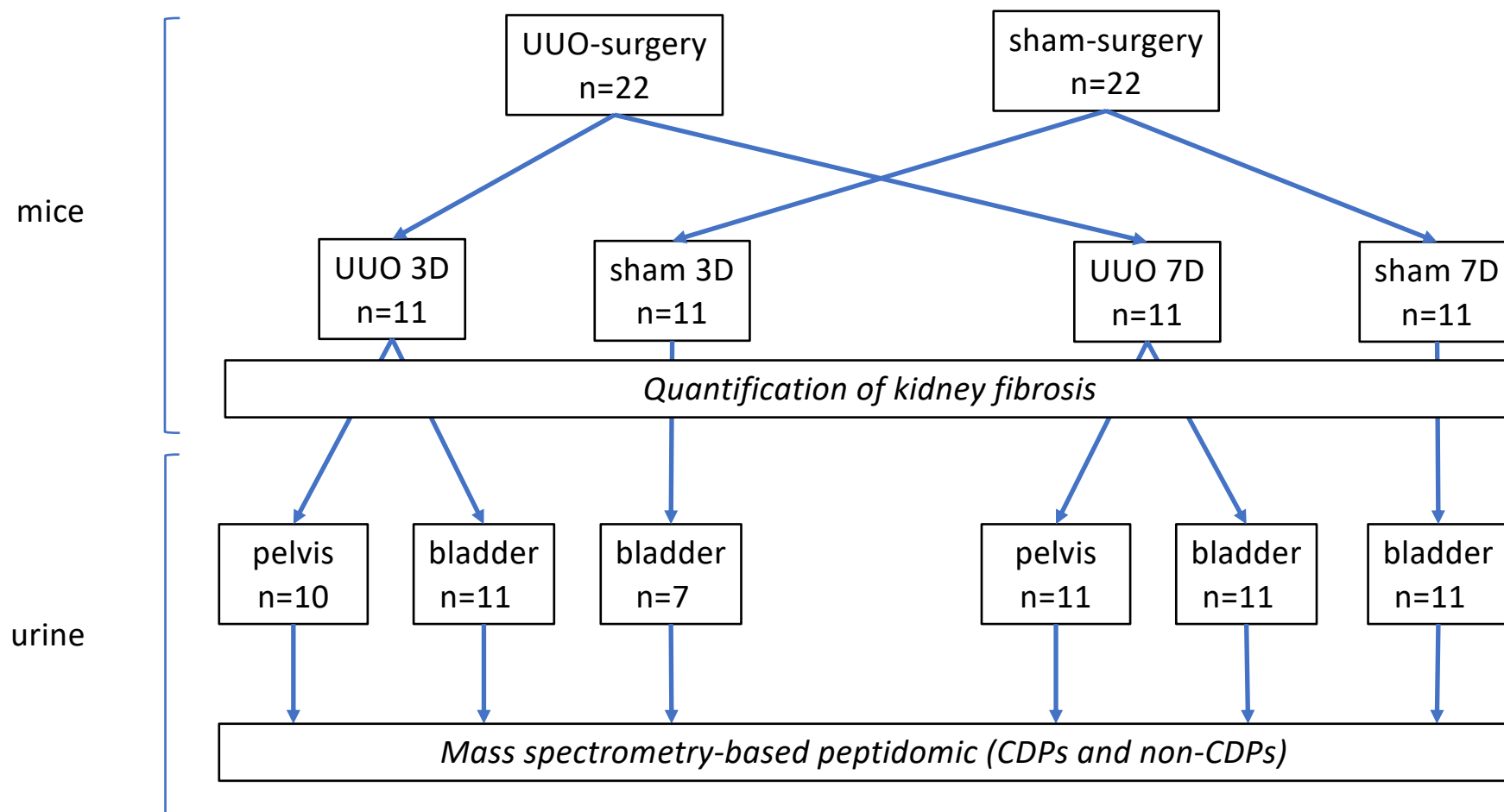


Figure S1. Study work flow.

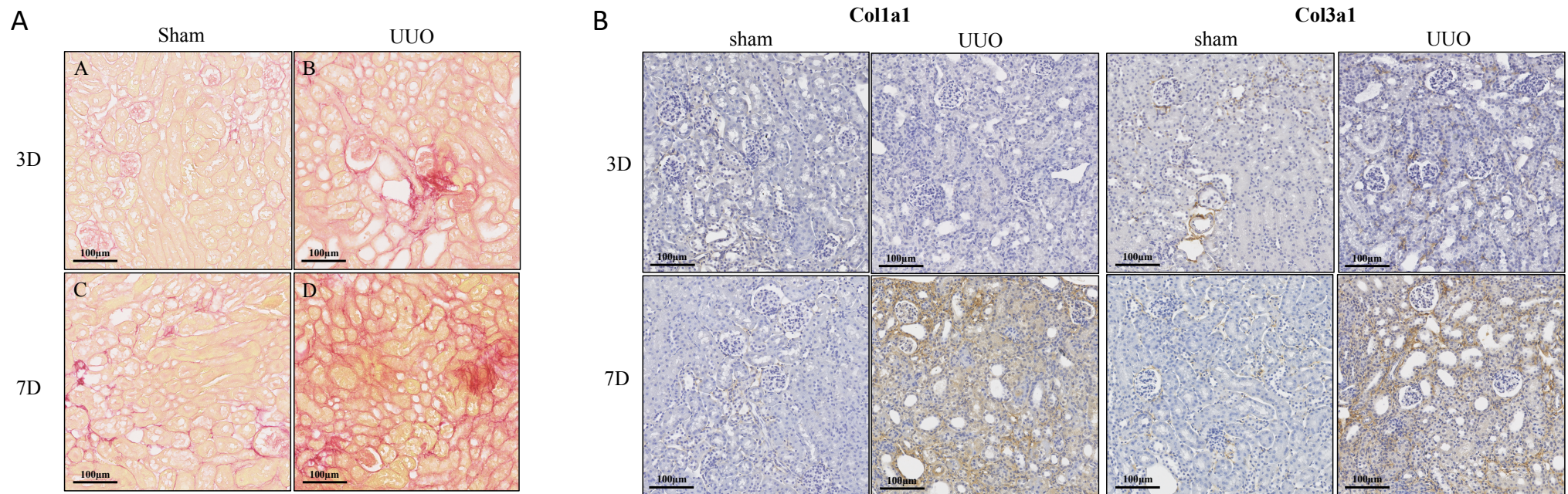
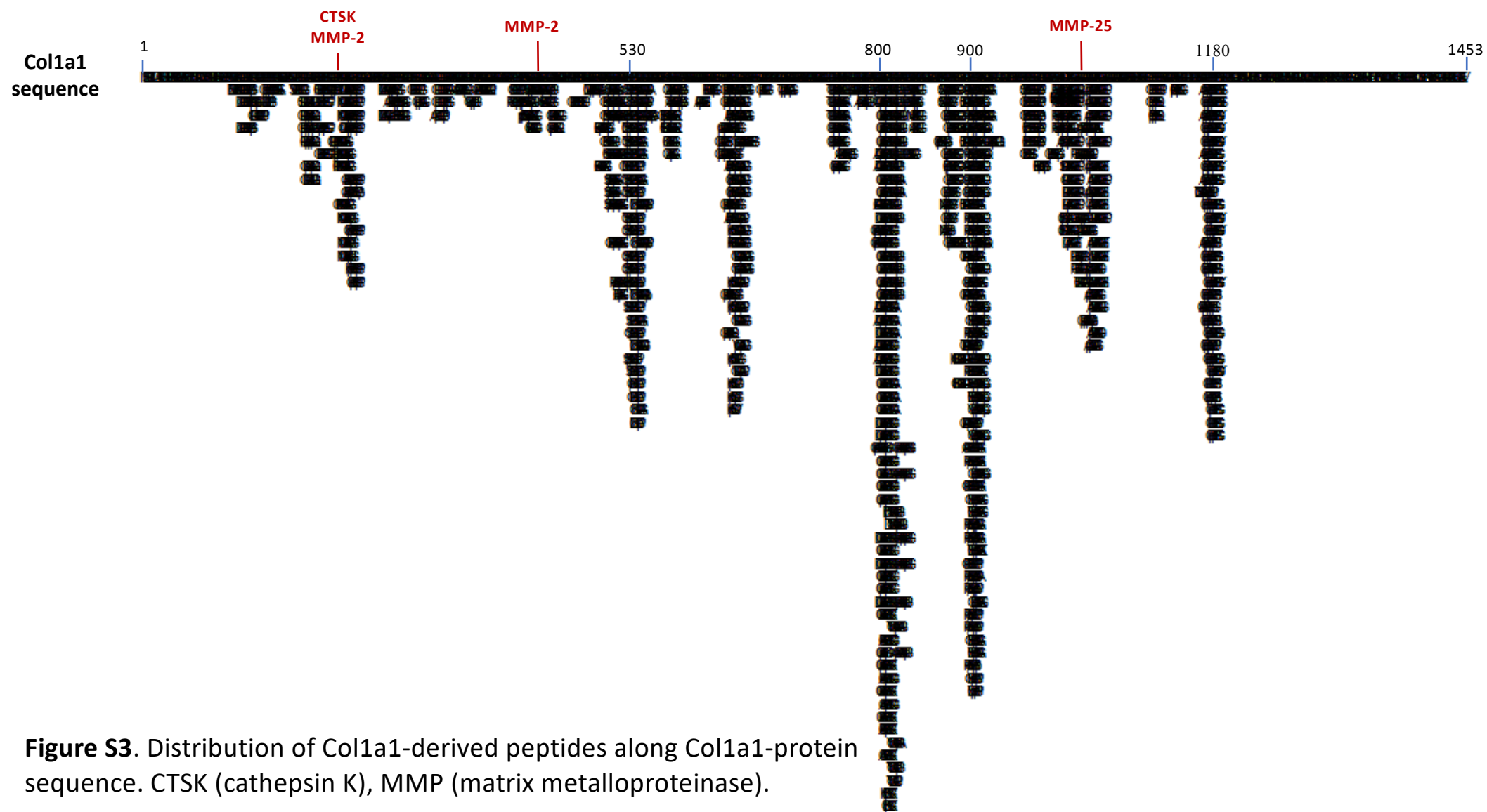


Figure S2. Representative pictures of the influence of UUO on Sirius red staining (A), and immune-labelling of COL1A1 and COL3A1 proteins (B).



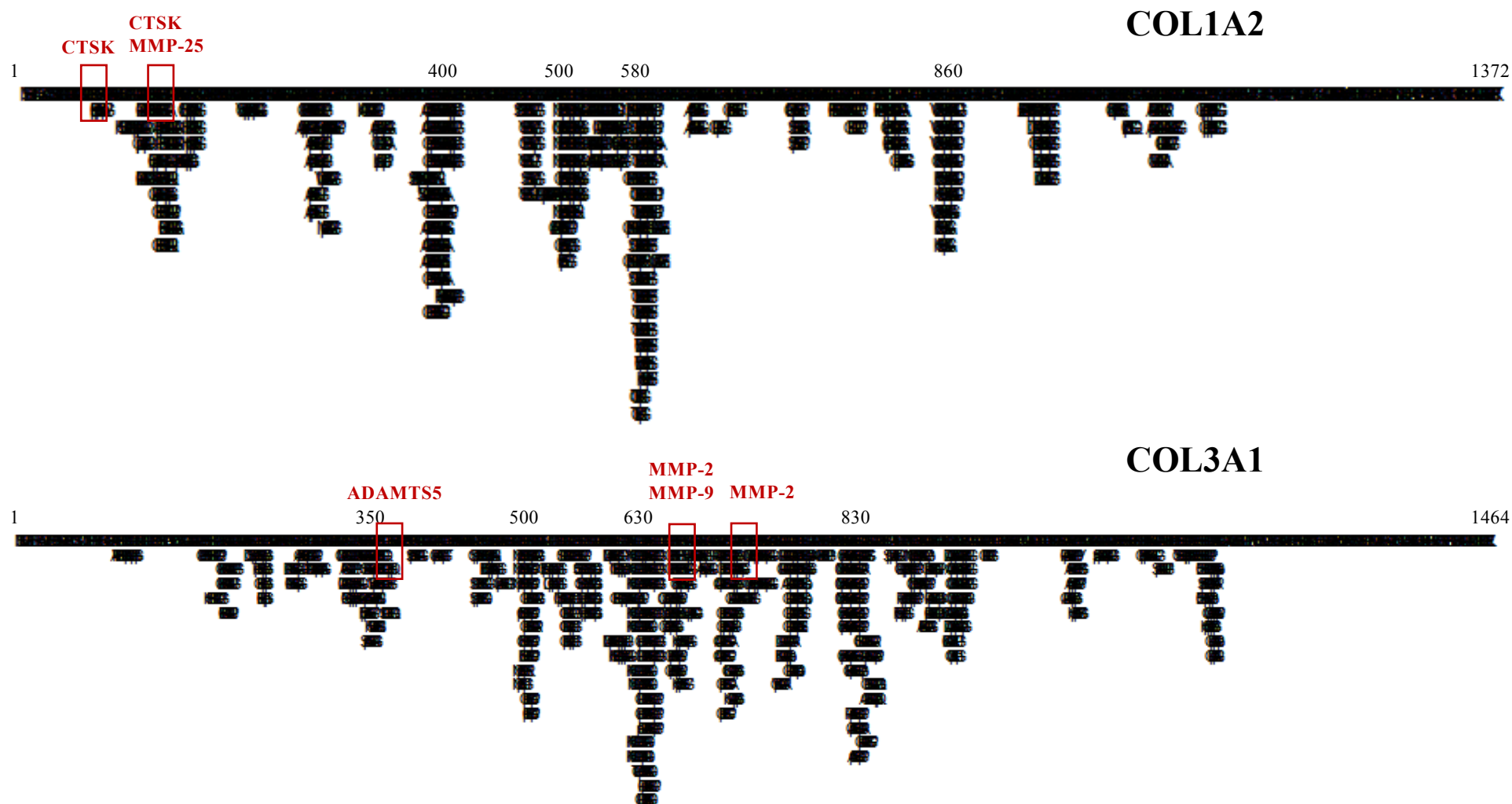


Figure S4. Distribution of Col1a2- and Col3a1-derived peptides along their parental protein sequence. CTSK (cathepsin K), MMP (matrix metalloproteinase).

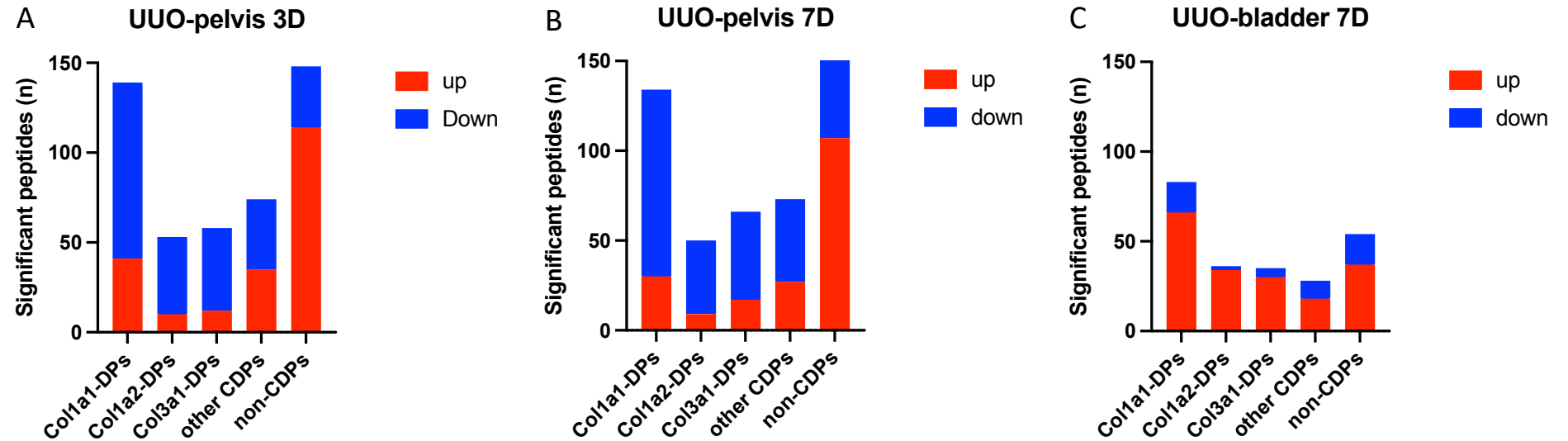
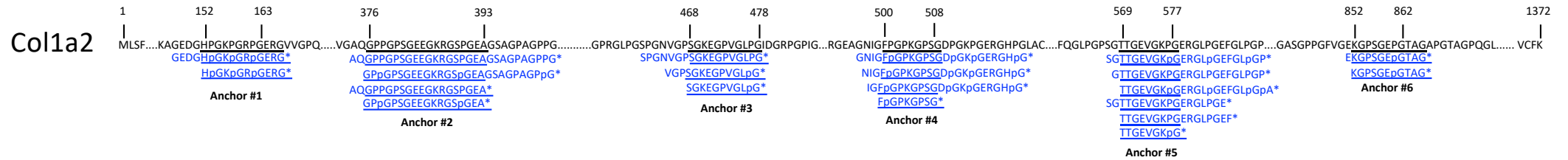


Figure S5. Proportion of significant CDP subtypes (Col1a1-, Col2a1, Col3a1, other-CDPs) up- and down-regulated by UUO-pelvis 3D (A), UUO-pelvis 7D (B) and UUO-bladder 7D (C), compared to sham-bladder.

UUO-pelvis 7D



UUO-bladder 7D

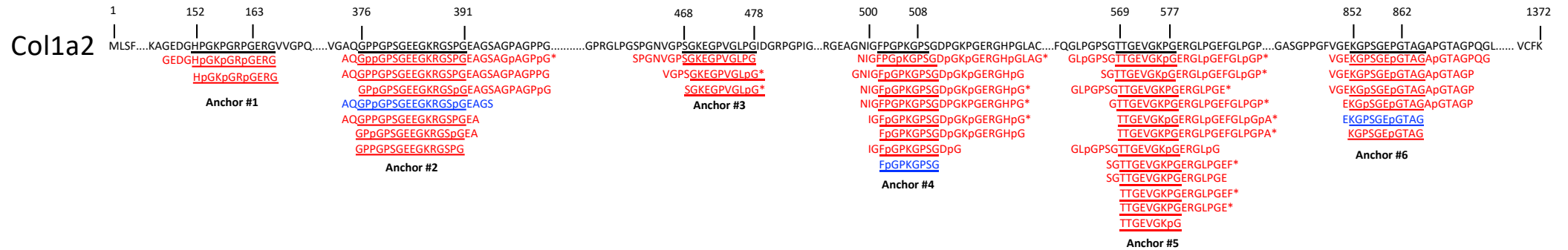


Figure S6. Distribution of up- and down-regulated urinary Col1a2-DPs along Col1a2 protein sequence in UUO-pelvis 7D and UUO-bladder at 7D.

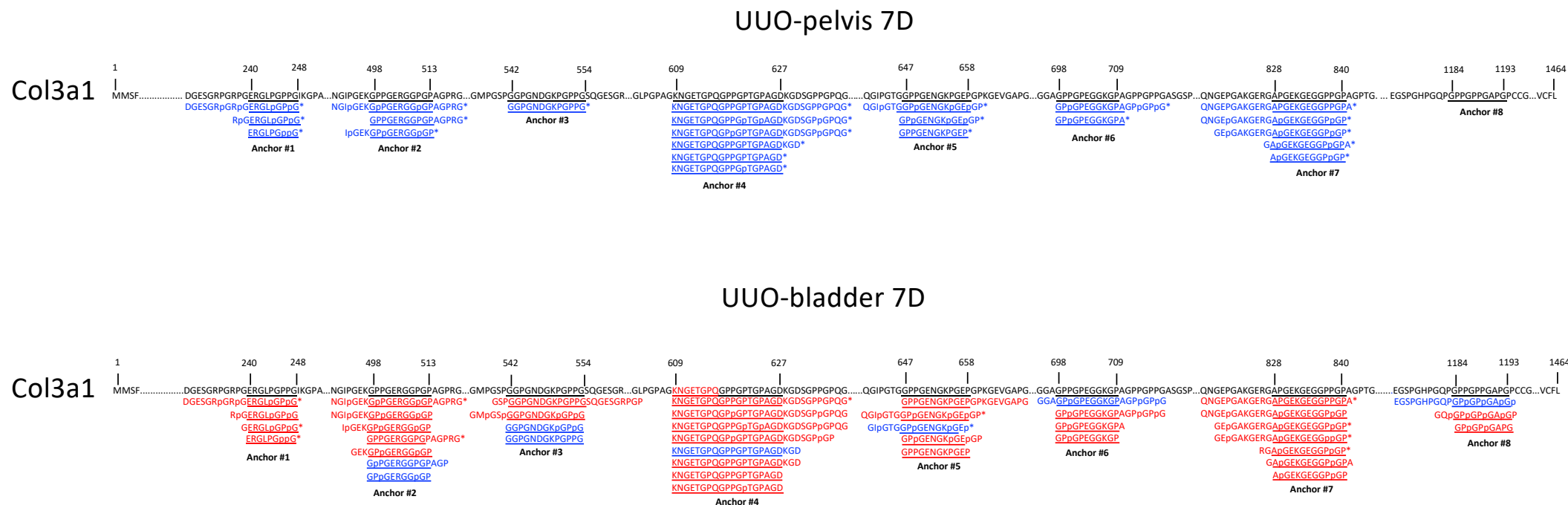
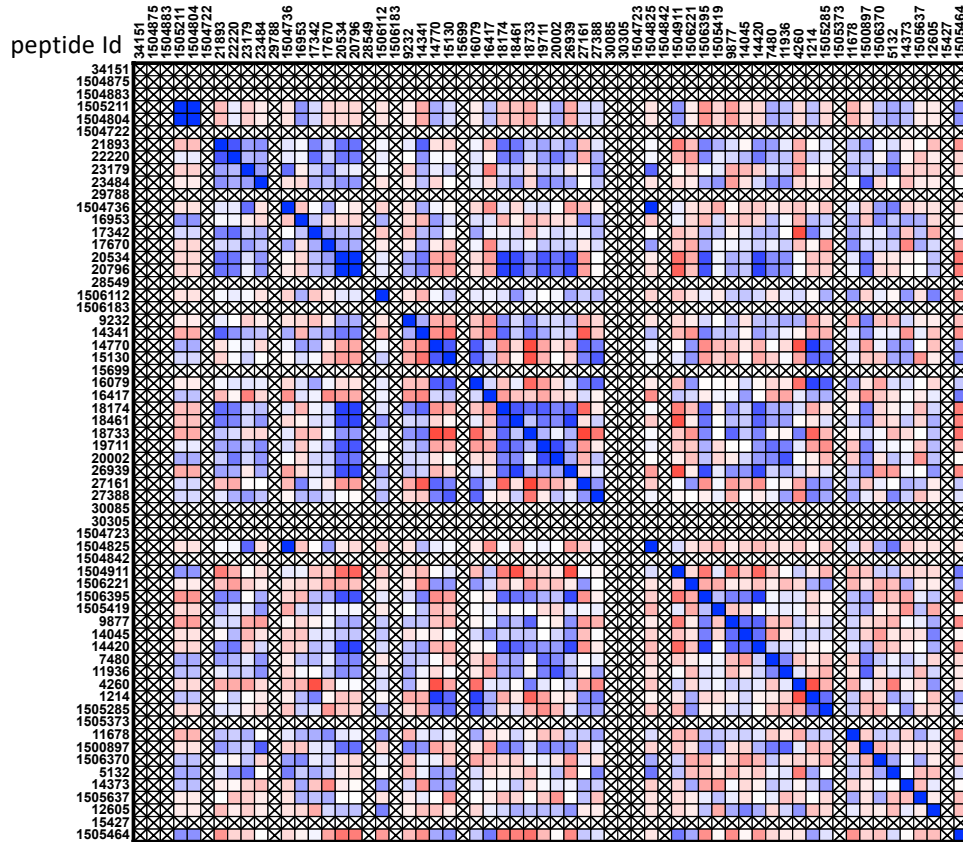
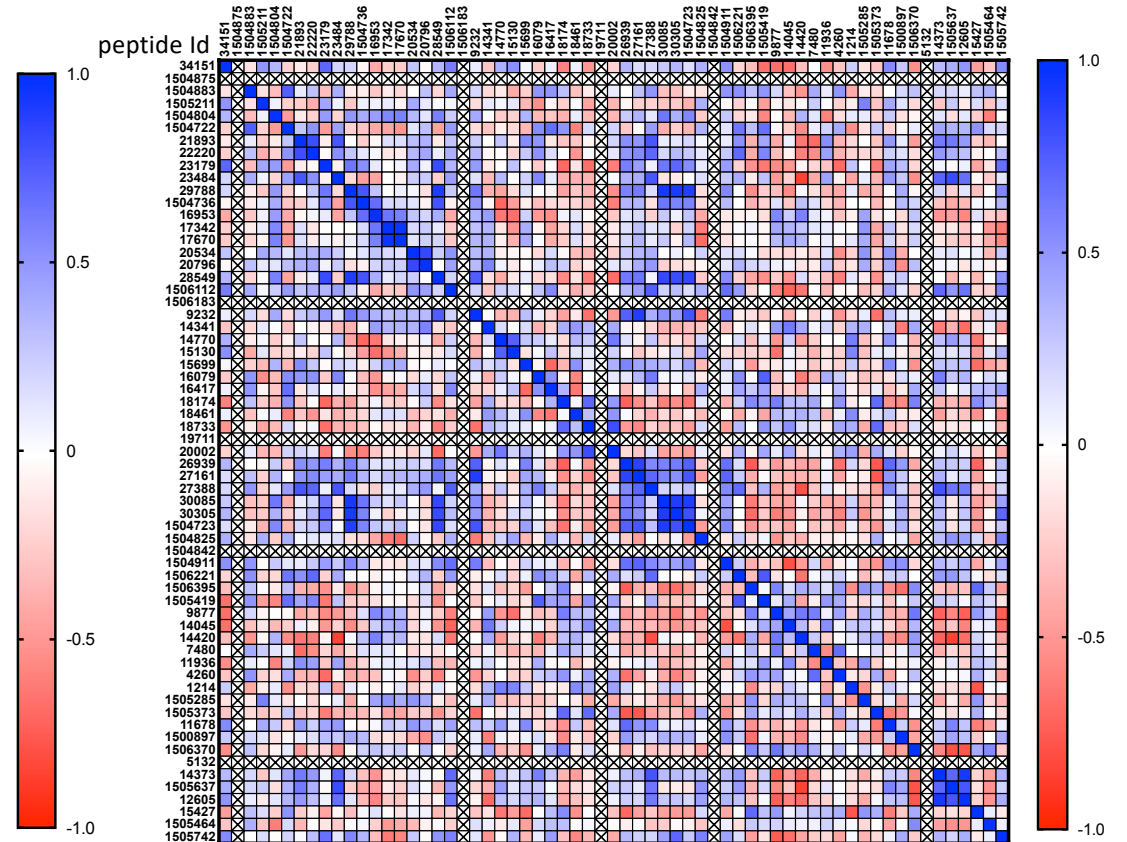


Figure S7. Distribution of up- and down-regulated urinary Col3a1-DPs along Col3a1 protein sequence in UUO-pelvis 7D and UUO-bladder at 7D

Col1a1-DPs in cluster 800 (804-844)



UUU-pelvis 7D



UUU-bladder 7D

Figure S8. Spearman correlation matrices of abundance of Col1a1-derived peptides (Col1a1-DPs) from cluster 800 in UUU-pelvis 7D and UUU-bladder 7D. Values of r and P values are reported in Table S3.

	UUO-pelvis				UUO-bladder	
	3D (148)		7D (152)		7D (62)	
Peptide	up	down	up	down	up	down
Cfd	13	2	11	2	2	0
Clu	11	0	8	0	0	2
Egf	11	3	7	3	2	1
Fga	0	0	0	0	3	0
Mup3	3	1	0	0	2	0
Napsa	1	1	0	0	1	1
Spp1	1	0	0	0	2	2
Umod	3	2	4	3	0	2
Kap	9	1	8	0	0	0
Mup11	2	0	2	0	0	0
Mup17	0	0	2	0	0	0
Mup6	4	0	6	0	0	0
SerpinAa1	2	0	1	1	0	0

Table S2. Number of significant up- and down-regulated non-CDPs in pelvic and bladder urine.