Supplemental Material

Renal Fibrosis, Immune Cell Infiltration and Changes of TRPC Channel Expression after Unilateral Ureteral Obstruction in *Trpc6*$^{-/-}$ Mice

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Figure S1

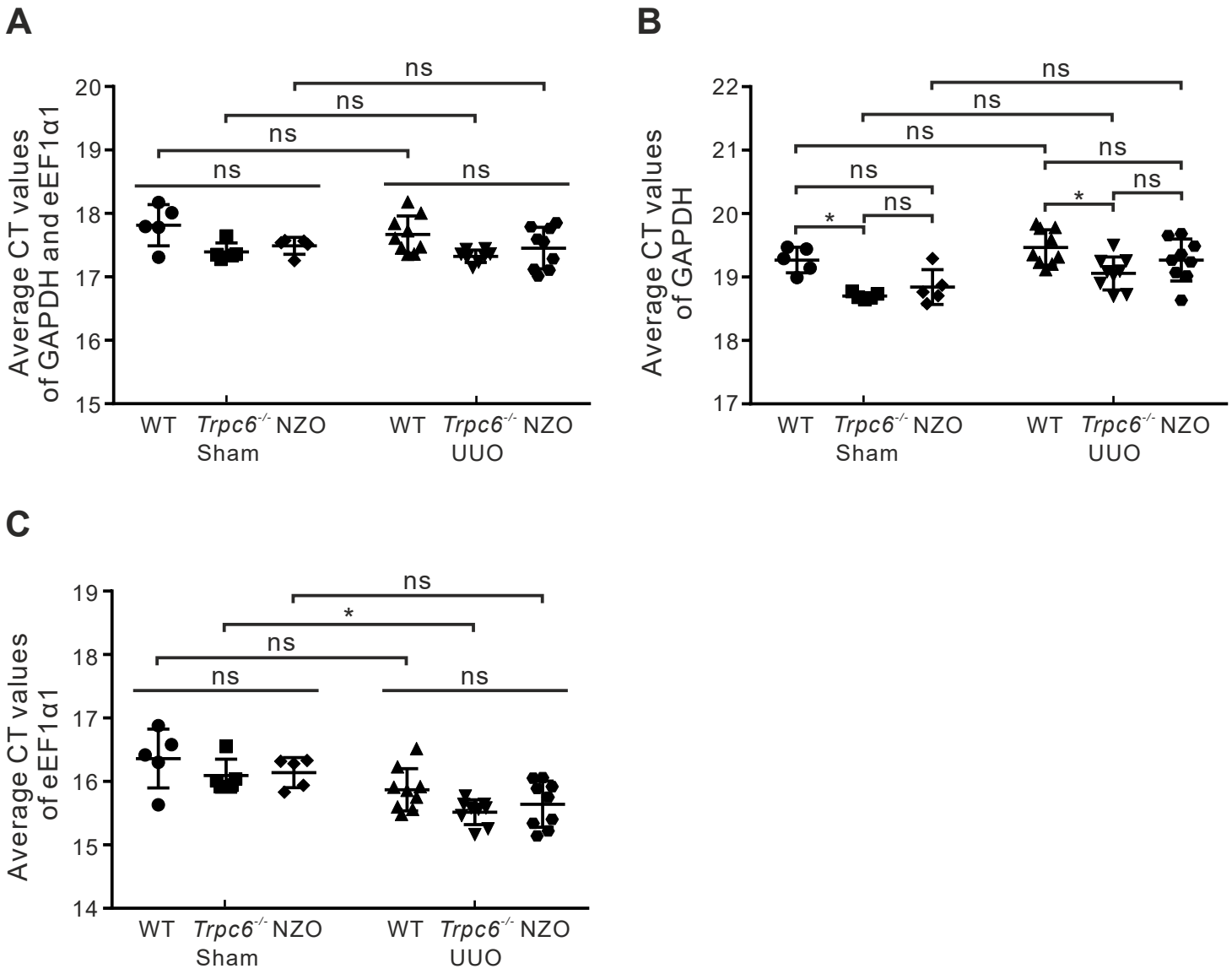

Fig. S1. (A) Average CT values of two housekeeping genes Glyceraldehyde-3-Phosphate Dehydrogenase (GAPDH) and Eukaryotic Translation Elongation Factor 1 alpha 1 (eEF1α1)]. **(B)** Average CT values of housekeeping genes GAPDH and **(C)** eEF1α1. Data are *means* ± *SD*; ns (*not significant*) $p>0.05$, *$p<0.05$.

Figure S2

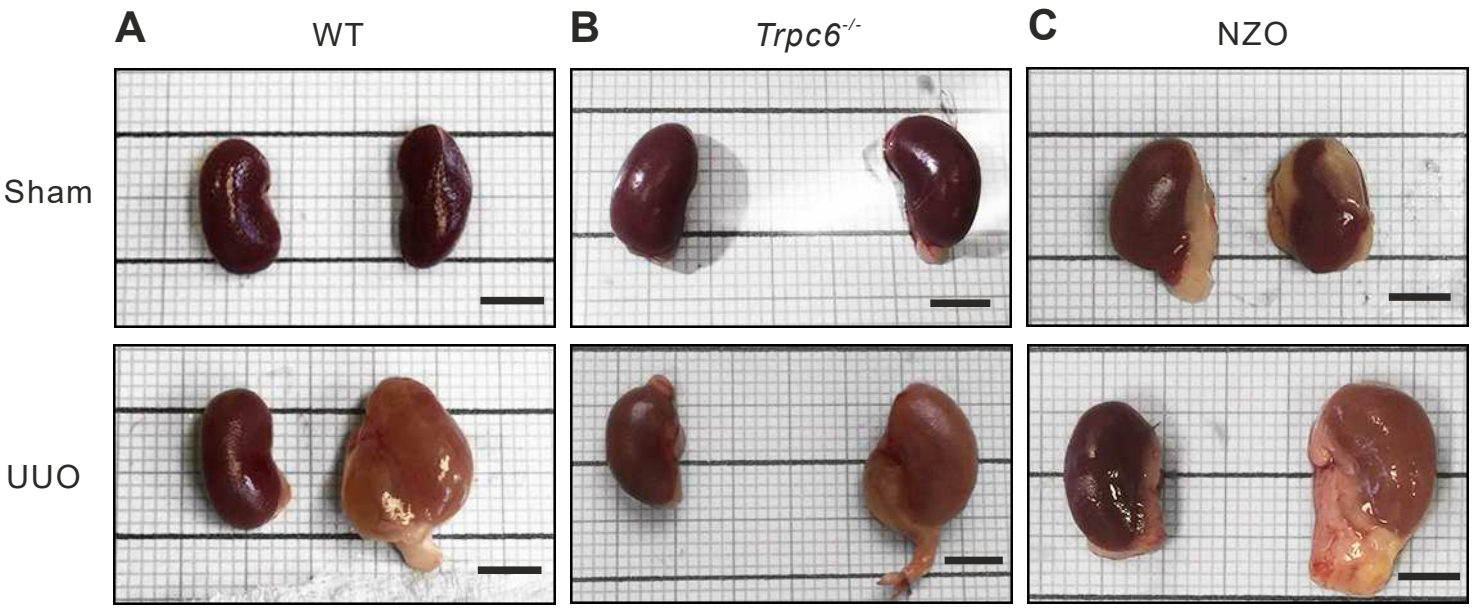

Fig. S2. Macroscopic analysis of the kidneys. Images of the left and right kidneys of **(A)** Wild type (WT) mice, **(B)** *Trpc6*$^{-/-}$ mice and **(C)** NZO mice. The left UUO kidneys of both WT, *Trpc6*$^{-/-}$ and NZO mice increased in size (hydronephrosis) compared to sham kidney. Scale bar: 1cm.

Figure S3

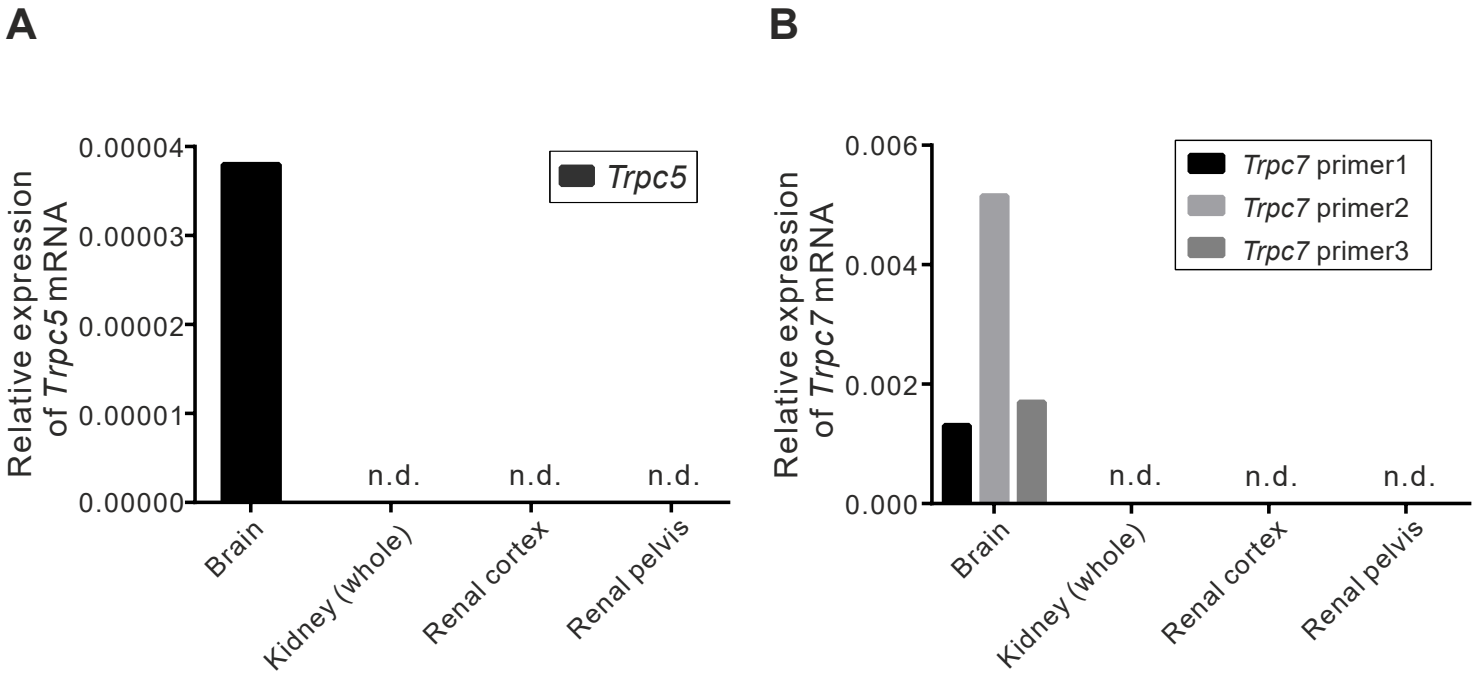

Fig. S3. Expression of *Trpc5* and *Trpc7* mRNA in brain and kidney samples in wildtype (WT) mice. **(A)** *Trpc5* mRNA expression and **(B)** *Trpc7* mRNA expression (detected by three primer pairs with different sequences). At mRNA level, *Trpc5* and *Trpc7* are highly expressed in brain but not in kidneys from WT mice. The ΔΔCT method was used for relative quantification. n.d., *not detected*.

Table S1: Details of specific primers used in real-time PCR experiments.

Gene	Forward	Probe	Reverse
GAPDH	5'-TGT GTC CGT CGT GGA TCT GA-3'	5'-6-FAM-TGC CGC CTG GAG AAA CCT GCC-TAMRA -3'	5'-CCT GCT TCA CCA CCT TCT TGA-3'
eEF1α1	5'-TCG TCG TAA TCG GAC ACG TA-3'	-	5'-CAG CAG CCT CCT TCT CAA AC-3'
Trpc1	5'-TGG GCC CAC TGC AGA TTT CAA-3'	-	5'-AAG ATG GCC ACG TGC GCT AAG GAG-3'
Trpc2	5'-TTG CCT CCC TCA TCT TCC TCA CCA-3'	-	5'-CCG CAA GCC CTC GAT CCA CAC CT-3'
Trpc3	5'-AGC CGA GCC CCT GGA AAG ACA C-3'	-	5'-CCG ATG GCG AGG AAT GGA AGA C-3'
Trpc4	5'-GGG CGG CGT GCT GCT GAT-3'	-	5'-CCG CGT TGG CTG ACT GTA TTG TAG-3'
Trpc5	5'-AAC TCC CTC TAC CTG GCA ACT A-3'	-	5'-GGA TAT GAG ACG CAA CGA ACT T-3'
Trpc6	5'-GAC CGT TCA TGA AGT TTG TAG CAC-3'	-	5'-AGT ATT CTT TGG GGC CTT GAG TCC-3'
Trpc7(primer1)	5'-GTG GGC GTG CTG GAC CTG-3'	-	5'-AGA CTG TTG CCG TAA GCC TGA GAG-3'
Trpc7(primer2)	5'-GCG GCC CCA TGA CTA CTT C-3'	-	5'-TGG ATA GGG ACA GGT AGG CG-3'
Trpc7(primer3)	5'-CGT CCA AGT CTG AGC CGA AT-3'	-	5'-GGT TTG TCC TAG CTT GCT GC-3'
Col1α1	5'-CAT GTT CAG CTT TGT GGA CCT-3'	-	5'-GCA GCT GAC TTC AGG GAT GT-3'
Col3α1	5'-CTC ACC CTT CTT CAT CCC ACT CTT A-3'	-	5'-ACA TGG TTC TGG CTT CCA GAC AT-3'

Col4α1	5’-TTA AAG G ACT CCA GGG ACC AC-3’	-	5’-CCC ACT GAG CCT GTC ACA C-3’
αSMA (ACTA2)	5’-ACT GGG ACG ACA TGG AAA AG-3’	-	5’-CAT CTC CAG AGT CCA GCA CA-3’
TGFβ1	5’-TGG AGC AAC ATG TGG AAC TC-3’	-	5’-GTC AGC AGC CGG TTA CCA-3’
VCAM1	5’-CTG GGA AGC TGG AAC GAA GT-3’	-	5’-GCC AAA CAC TTG ACC GTG AC-3’
ICAM1	5’-CTG GGC TTG GAG ACT CAG TG-3’	-	5’-CCA CAC TCT CCG GAA ACG AA-3’
MCP1 (CCL2)	5’-TTA AAA ACC TGG ATC GGA ACC AA-3’	-	5’-GCA TTA GCT TCA GAT TTA CGG GT-3’
IL1β	5’-GAA ATG CCA CCT TTT GAC AGT G-3’	-	5’-TGG ATG CTC TCA TCA GGA CAG-3’
IL6	5’-ATC CTC TGG AAC CCC ACA C-3’	-	5’-GAA CTT TCG TAC TGA TCC TCG TG-3’
TNFα	5’-CTG AAC TTC GGG GTG ATC GG-3’	-	5’-GGC TTG TCA CTC GAA TTT TGA GA-3’