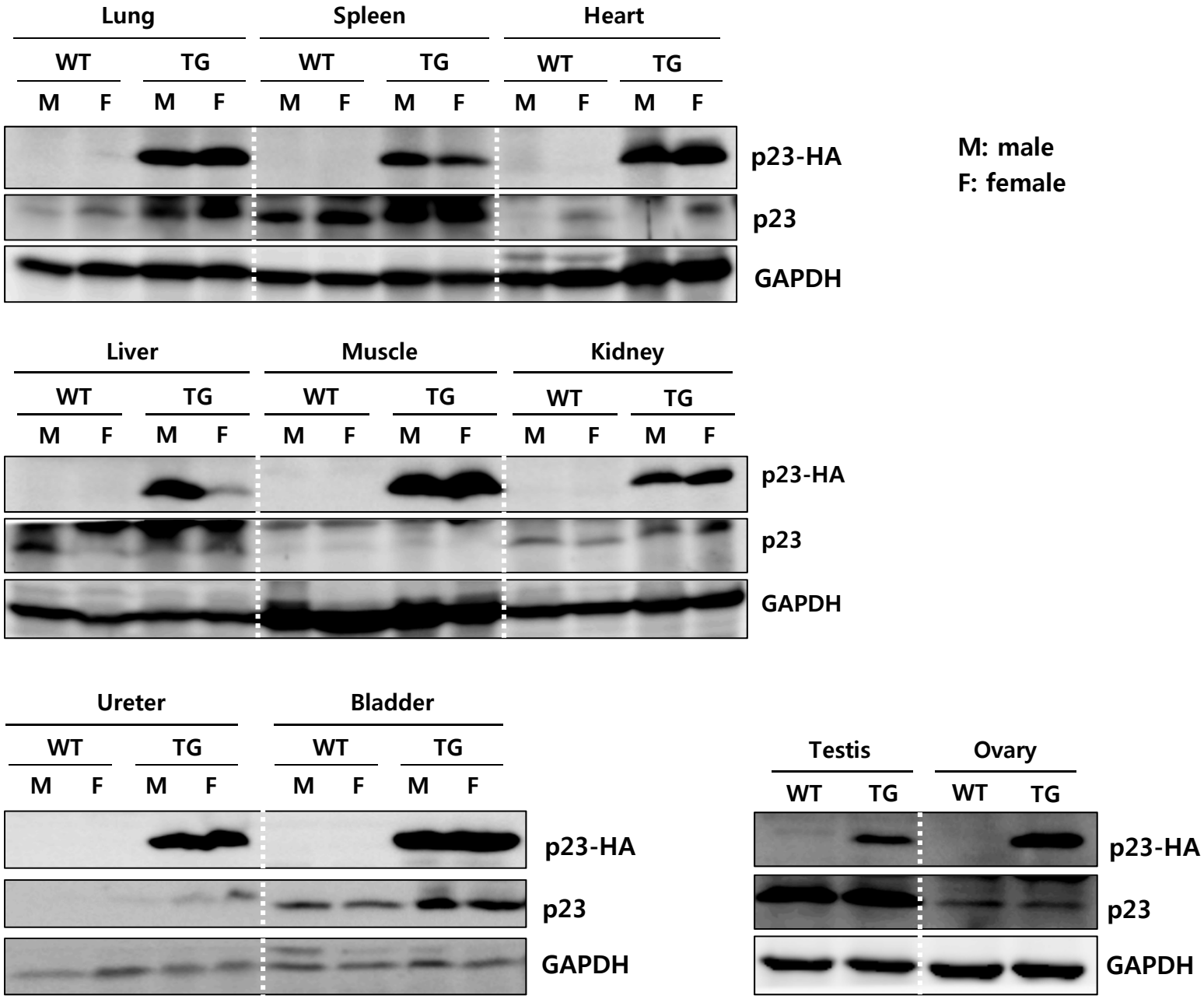
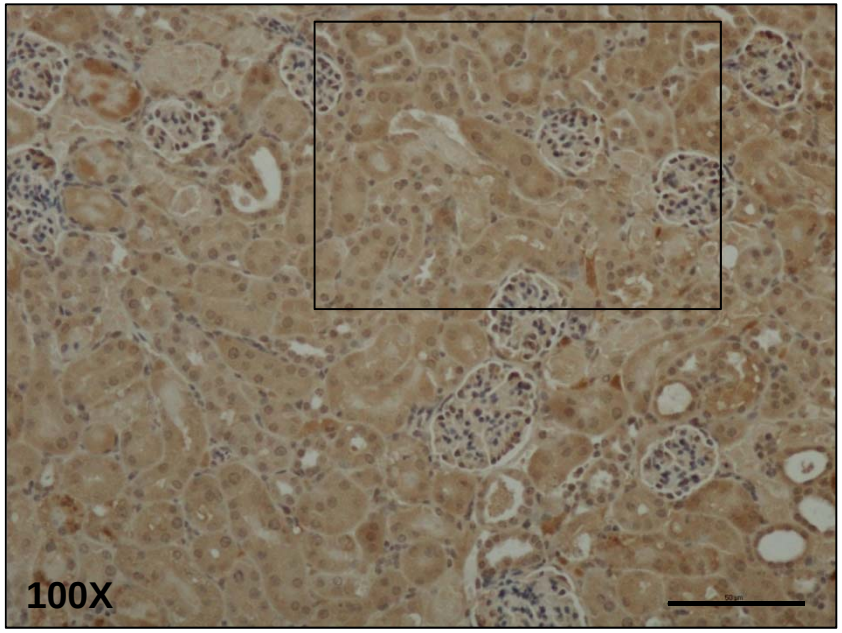
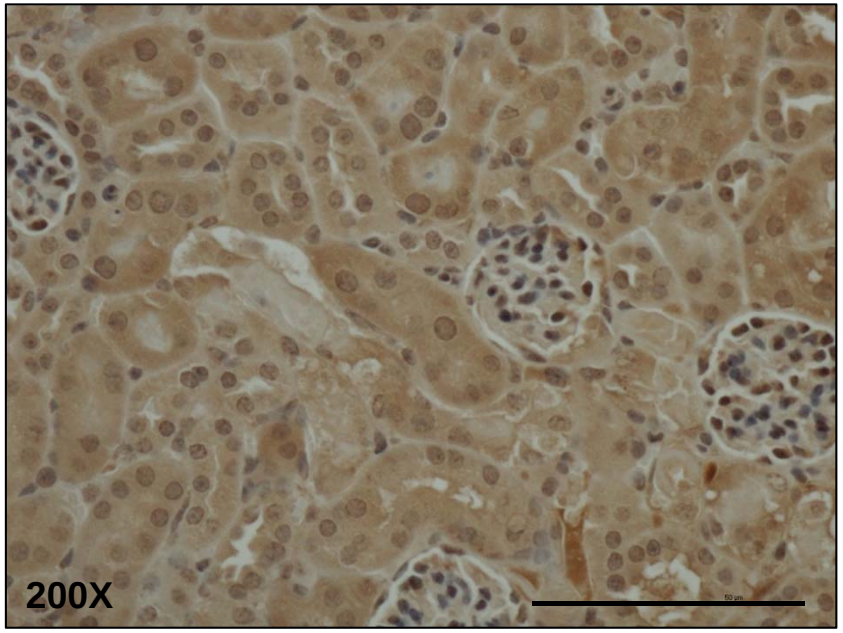
Supplementary figure 1



Supplementary figure 2

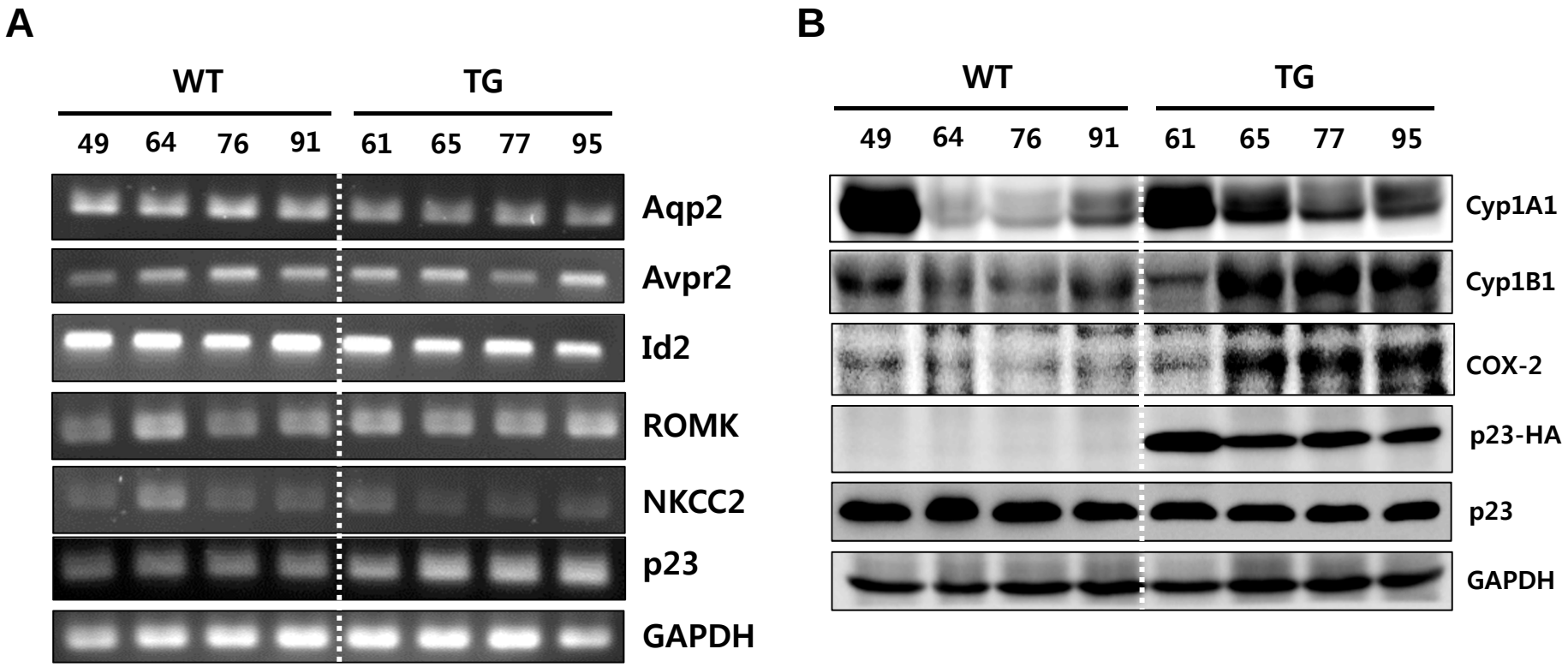
Endogenous p23





Supplementary figure 3

p23 TG Line C



Supplementary figure 1. The p23 transgene expression patterns in male and female mice. Western blot analysis showed the representative expression of endogenous and transgenic p23 in various organs as indicated. Proteins were isolated from indicated organs of p23 TG and WT male and female mice. GAPDH was used as a loading control. The representative data were obtained from the line G mice. M, male; F, female.

Supplementary figure 2. Expression patterns of endogenous p23 in the kidney. Immunohistochemical staining using an anti-p23 antibody showed the representative expression of endogenous p23 protein in the kidney of WT mice (*Scale bar* = 200 μm).

Supplementary figure 3. Altered expression of hydronephrosis-related genes in the kidneys of TG line C mice. (A) mRNA transcripts of *Aqp2, Avpr2*, *ROMK*, *NKCC2*, and *p23* in the kidneys from WT (lanes 1-4) and p23 TG (lanes 5-8) mice were quantified by RT-PCR. The transcript level was normalized to *Gapdh*. **(B)** The protein expression of Cyp1A1, Cyp1B1, and Cox-2 in the kidneys from WT (lane 1-4) and p23 TG (lane 5-8) mice was analyzed by Western blotting using the indicated antibodies. The expression level was normalized to β-actin.