

Fig. S1. (A) Whole-mount *in situ* hybridization and (B) X-gal staining of $Tbx18^{LacZl+}$ embryo showing Tbx18 expresison in the mesenchyme ventral to the metaneprhic region at E11.5. (C,D) X-gal staining on sections of $Tbx18^{LacZl+}$ kidneys at E12.5 (C) and E13.5 (D). Solid arrowheads point to Tbx18+ cells in renal capsule. More Tbx18+ cells in the capsular stroma were seen in the ventral side close to the ureter (arrows). Open arrowhead in C points to Tbx18+ cells inside of the kidney. Open arrowheads in D point to Tbx18+ stroma cells in the kidney. (E-H) X-gal staining of kidney sections from $Tbx18^{Crel+}$; $R26R^{LacZl+}$ showing Tbx18+ lineage in the mesenchyme ventral to the kidney at E11.5 and E12.5 and in the ureteral mesenchyme. Tbx18+ lineage was also detected in the pelvic region and renal capsule. Abb.: k, kidney; mm, metanephric mesenchyme; ub, ureteric bud; ur, ureter. Scale bar: 100 μm for A-C and E-H and 200 μm for D.