



Supplemental Figure 1

Abnormal ureter/bladder connection observed in dilated *Ptprs*;*Ptprf* double-mutant ureters.

(Top panel) A schematic diagram of wild type (left side) and *Ptprs*;*Ptprf* double-mutant (right side) E18.5 UGS. Red lines indicate the levels of sections shown in the lower panel.

(Bottom panel) Sagittal sections of wild type (A-C) and *Ptprs*;*Ptprf* double-mutant (D-F) UGSs stained by H&E. Black arrowheads indicate the cavities of the ureters, and white arrowheads indicate the ureter orifices. The ureter was winding abnormally to connect the bladder (D-F). Scale bar indicates 100 μ m.