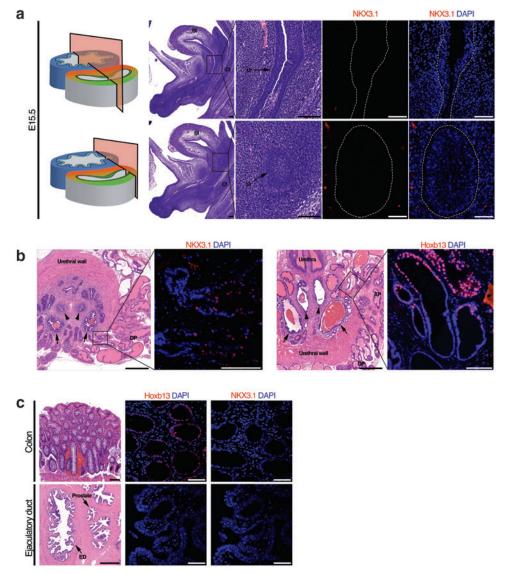
## **Supplementary Data**



SUPPLEMENTARY FIG. S1. De novo expression of NXK3.1 and re-expression of Hoxb13 in the prostate. (a) Diagram shows serial sagittal section positions in E15.5 mouse embryo. H&E staining and IF staining of NKX3.1 in serial sagittal-sectioned E15.5 mouse embryo. *Dash lines* encircle the UGS epithelium. (b) H&E staining and IF staining of NKX3.1 and Hoxb13 in the junction of urethra and prostate. *Arrows*, seminal vesicle ducts. *Arrowheads*, ejaculatory ducts. Scale bars,  $500 \,\mu\text{m}$  (H&E staining),  $100 \,\mu\text{m}$  (IF staining). (c) H&E staining and IF staining of NKX3.1 and Hoxb13 in the human colon and ejaculatory ducts. Scale bars,  $100 \,\mu\text{m}$  (HE staining),  $50 \,\mu\text{m}$  (IF staining). AP, anterior prostate; DP, dorsal prostate; H&E, hematoxylin and eosin; IF, immunofluorescence; UGS, urogenital sinus; Ur, urethra.