

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Mean Pearson correlation coefficients between NdPr single cell-, Cluster- and Visium spatial spot- RNA-seq samples. P-values reflect the statistical significance of the observed correlation, based on the random permutation of cluster cells.

File Name: Supplementary Data 2

Description: Differentially expressed genes in *Gata3* KO E9.5 nephric duct cells. The table shows the genes differentially expressed in *Gata3* KO (Pax2-GFP;Gata3KO-SC-3) versus control (Pax2-GFP SC-3) single cell RNA-seq libraries.

File Name: Supplementary Data 3

Description: Genotypes of Tfp2a/2b single and compound mutant embryos generated by CRISPR/Cas9 technology.