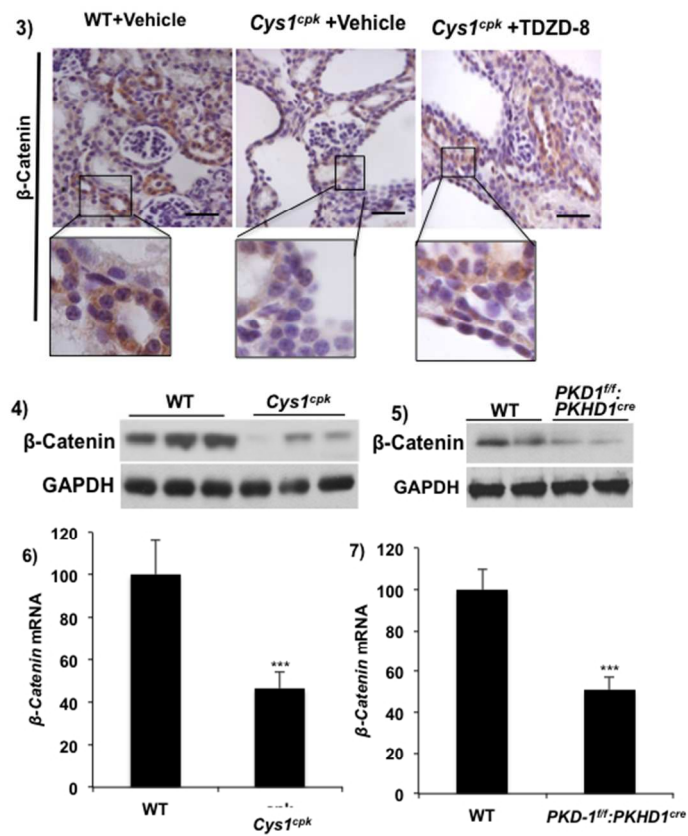


Supplemental-1: Bodyweight of WT and *Cys1^{cpk}* mice treated with vehicle or TDZD-8 from P3 to P14 showed no significant change.

Supplemental-2: Renal GSK3 β expression (red) in proximal tubules (green) of *Cys1^{cpk}*+*GSK3 β ^{CD-KO}* and *PKD1^{fl/fl}*:*GSK3 β ^{fl/fl}*:*PKHD1^{cre}* mice in which GSK3 β is knocked out in the renal collecting duct. (Scale bar=50 μ m).

60x81mm (300 x 300 DPI)



Supplemental 3: β-Catenin immunostaining (brown) was reduced in *Cys1^{cpk}*+vehicle compared to WT+vehicle kidneys. In the *Cys1^{cpk}*+TDZD-8 kidneys, more cytoplasmic staining for β-Catenin was observed. (Scale bar=25μm)

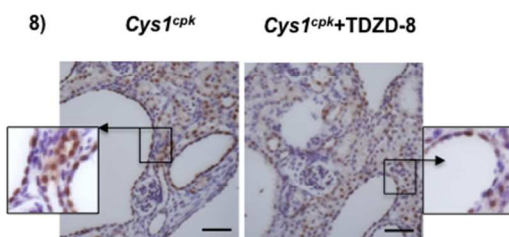
Supplemental 4: β-catenin protein levels at P14 are lower in the *Cys1^{cpk}* kidneys than in WT kidneys. Samples same as used in Fig-1a.

Supplemental 5: β-catenin protein levels at P21 are lower in the *PKD1^{fl/fl}:PKHD1^{cre}* kidneys than in WT kidneys. Samples same as used in Fig-1a.

Supplemental 6: β-catenin mRNA levels in WT and *Cys1^{cpk}* mice. (***)P<0.001, n=7/ group). Samples same as used in Fig-1d.

Supplemental 7: β-catenin mRNA levels in WT and *PKD1^{fl/fl}:PKHD1^{cre}* mice (***)P<0.001, n= 7/ group). Samples same as used in Fig-1e.

60x81mm (300 x 300 DPI)



Supplemental-8: *Cys1^{cpk}* mice treated with vehicle or TDZD-8 from P3 to P14 showed increased immunostaining for Cyclin D1 in the cyst lining epithelium. (Scale bar=25 μ m).

60x81mm (300 x 300 DPI)