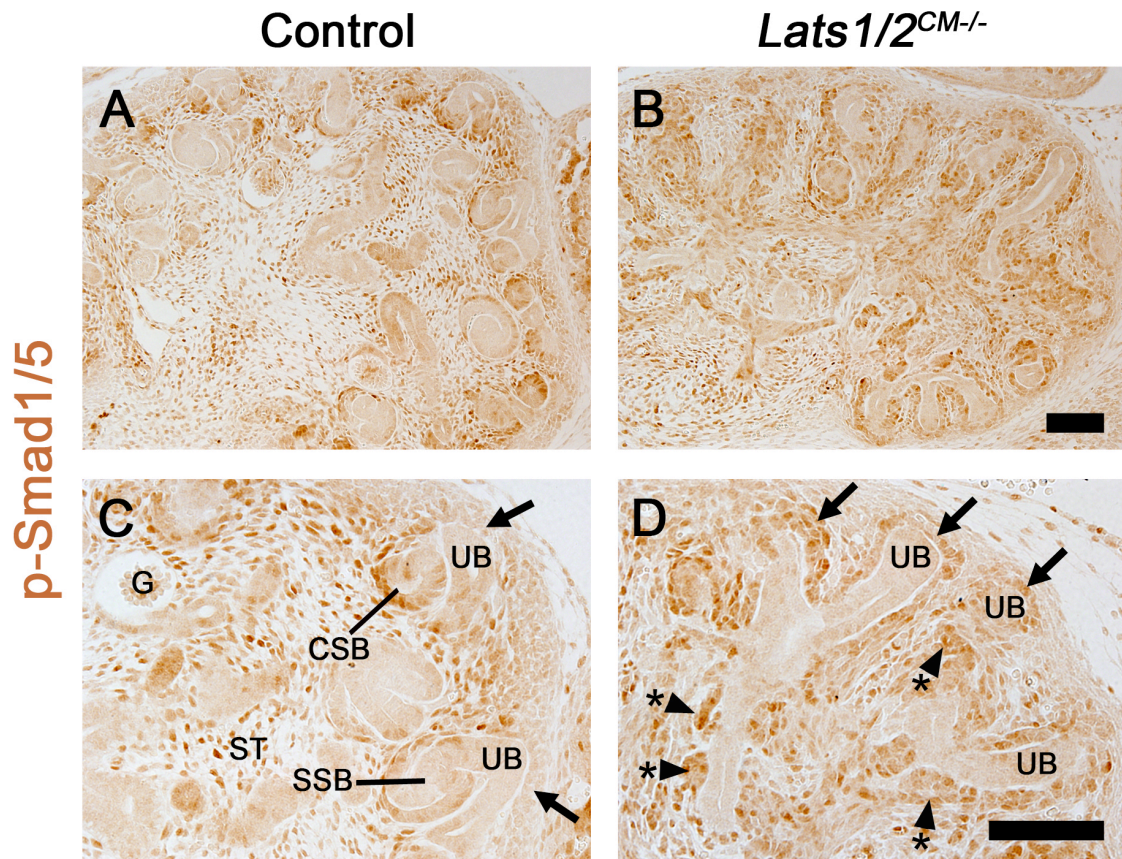


Supplemental figure 1: *Lats1* and *Lats2* deletion induces loss of epithelial characteristics

(A-H) β -catenin, Laminin, NCAM and Crumbs3 staining in control and *Lats1/2*^{CM-/-} E14.5 kidneys. Co-staining with NCAM (in control) and GFP antibody (in *Lats1/2*^{CM-/-} *mTmG*) mark NP-derived cells. Note the reduced β -catenin and NCAM staining in medullary accumulated interstitial cells of *Lats1/2*^{CM-/-} kidneys (boxes in B' and F'). Also, no Crumbs3 staining could be found in NP-derived cells in *Lats1/2*^{CM-/-} kidneys consistent with the absence of tubulogenesis. Scale bars represent 50 μ m.



Supplemental figure 2: Increase p-Smad1/5 staining in *Lats1/2*^{CM-/-} kidneys

(A-D) Staining at E14.5 revealed increase nuclear phospho-Smad1/5 in both NPCs (arrows) and derived cells (arrowheads) in *Lats1/2*^{CM-/-} compared to NPCs and early nephrons (CSB, SSB) in controls. Scale bars represent 100 μ m.