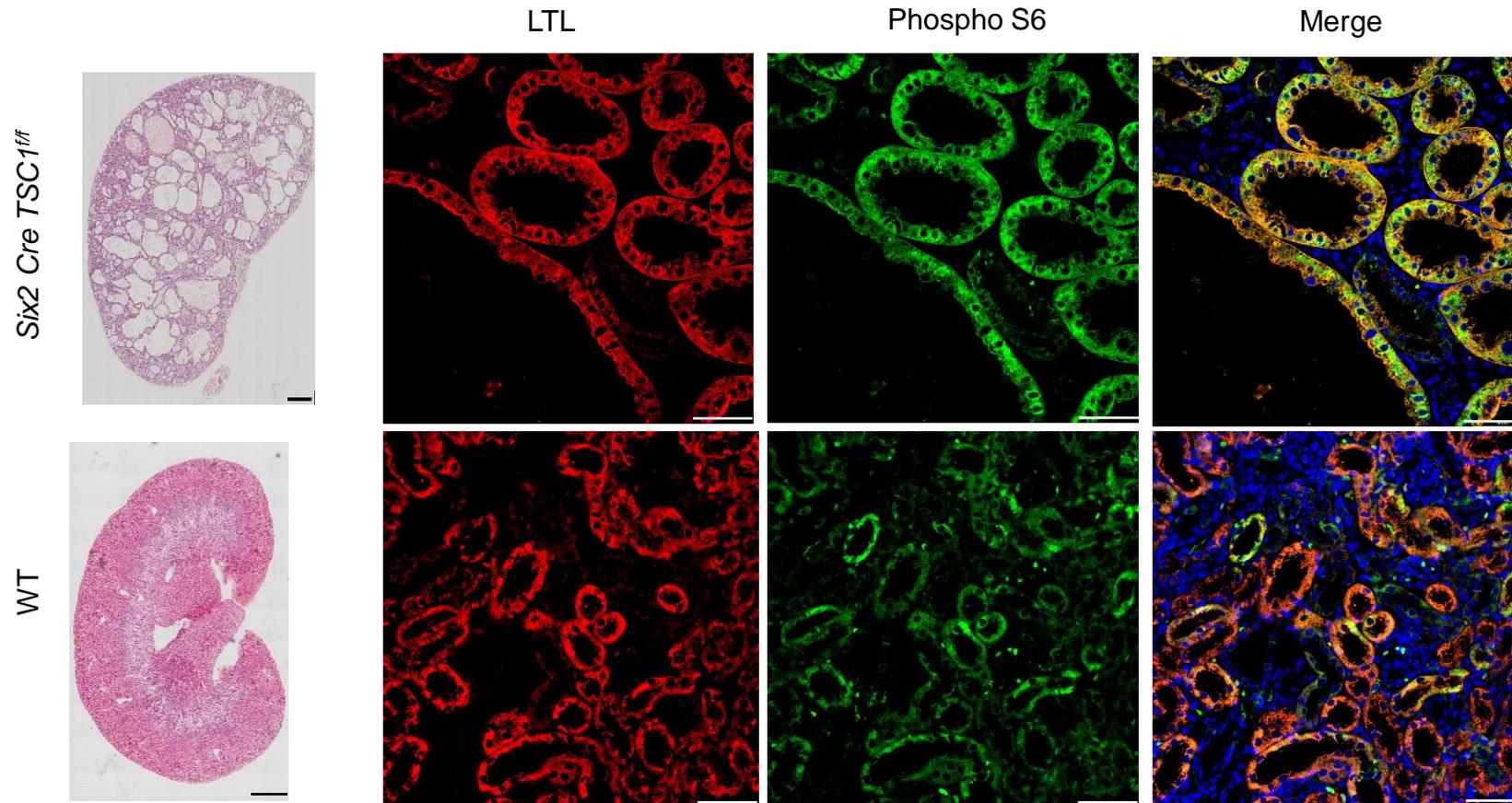
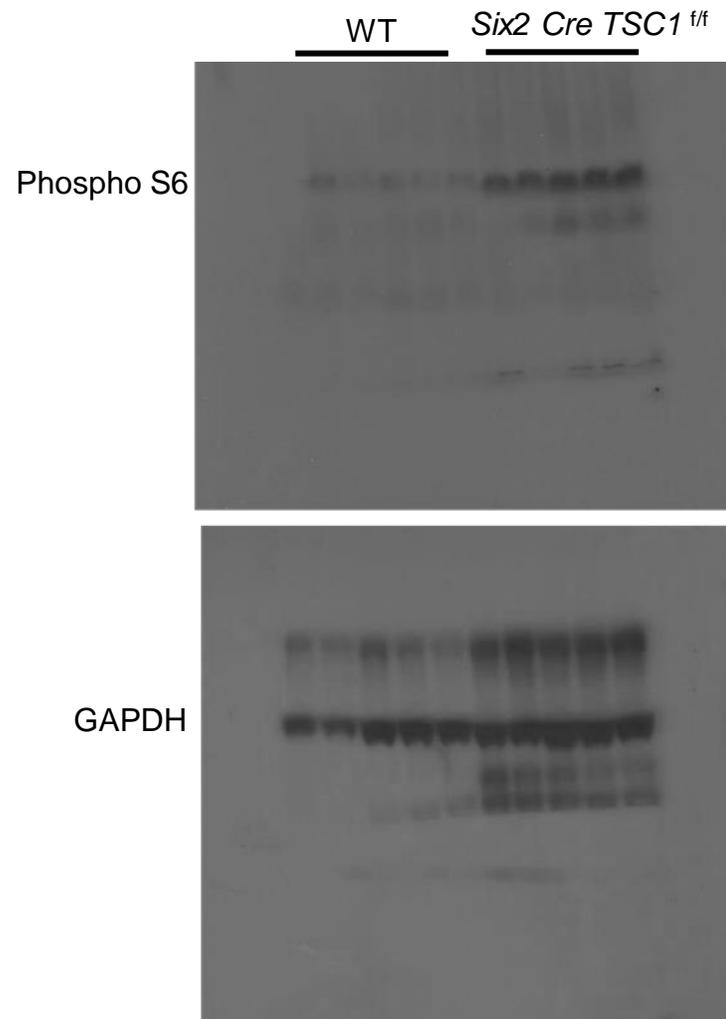


**Supplementary figure 1: mTOR pathway activation in proximal tubule cells and cyst lining epithelial cells.**

Kidney sections from *Six2 Cre TSC1<sup>fl/fl</sup>* embryos at E17.5 were co-stained for phosphor S6 and LTL as indicated, showing mTOR pathway activation in proximal tubule cells and cyst lining epithelial cells. Scale bar =50 $\mu$ m.



**Supplementary Figure 2: mTOR activation in proximal tubule cells of *Six2 Cre<sup>tg/+</sup> TSC1<sup>ff</sup>* mice at P14, treated with Rapamycin during embryogenesis.** Kidney sections of *Six2 CreTSC1<sup>ff</sup>* mice treated with Rapamycin during embryogenesis. *Six2 CreTSC1<sup>ff</sup>* and WT mice kidney sections at P14, were co-stained for phospho S6 and LTL, showing mTOR pathway activation in cyst lining epithelial cells. H&E staining scale bar=500 $\mu$ m, fluorescence staining scale bar =50 $\mu$ m.



**Supplementary figure 3: mTOR pathway is hyper activated in kidney extracts obtained from *Six2 Cre TSC1<sup>ff</sup>* mice compared to WT mice.** Kidneys from WT and *Six2Cre TSC1<sup>ff</sup>* mice (n=5 in each group) were homogenized and immunoblotted for pS6 (as an indication for mTOR activity) and GAPDH. mTOR pathway is significantly activated in *Six2Cre TSC1<sup>ff</sup>* kidney extracts compared to WT kidney extracts.