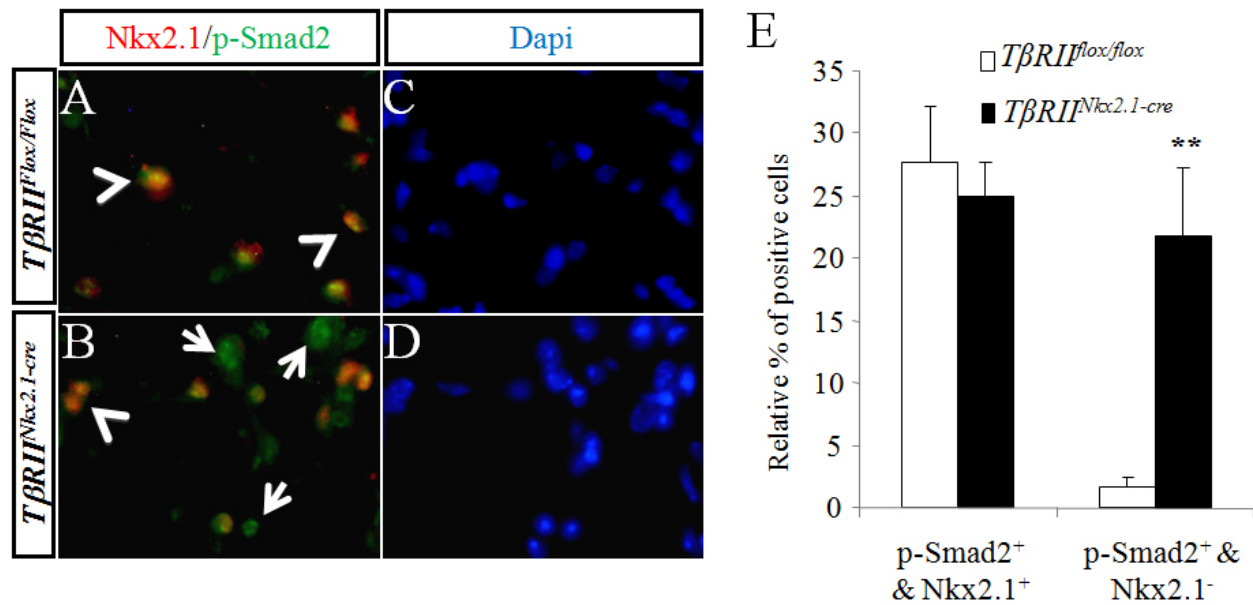


**Supplementary Figure 1.** Double immunofluorescence detection of lung epithelial differentiation markers in *TβRII<sup>flox/flox</sup>* and *TβRII<sup>Nkx2.1-cre</sup>* lungs. Panels A and B, double immunostaining for SpC in red and  $\alpha$ -tubulin in green. Panels C and D, SpB in red and CC-10 in green. Panels E and F, T1- $\alpha$  in red and Nkx2.1 in green. Scale bar: 400 $\mu$ m.



**Supplementary Figure 2.** Phospho-Smad2 in non-epithelial (Nkx2.1-negative) cells in  $T\beta RII^{Nkx2.1-cre}$  lungs. Panels A and B, Double immunofluorescent detection of Nkx2.1 (red) and p-Smad2 (green) in 8 week-old  $T\beta RII^{lox/lox}$  and  $T\beta RII^{Nkx2.1-cre}$  lungs, respectively. Panels C & D are Dapi staining of sections shown in Panels A and B respectively. Panel E, Relative percent of positive cells, normalized to total cell number in each lung. Multiple fields (More than 4000 cells in each group) were counted and averaged. Arrowheads=Nkx2.1+p-Smad2 double positive cells, arrow=p-Smad2 singel positive cells. \*\* = p<0.01