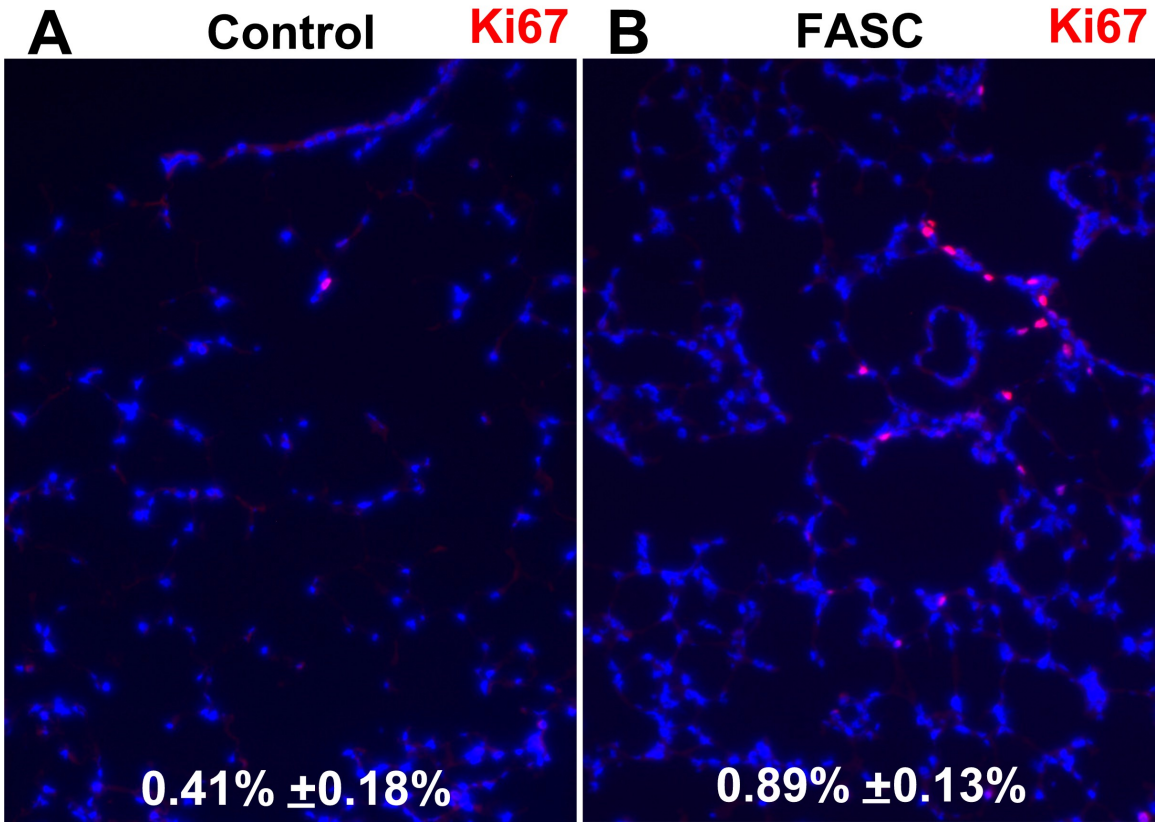
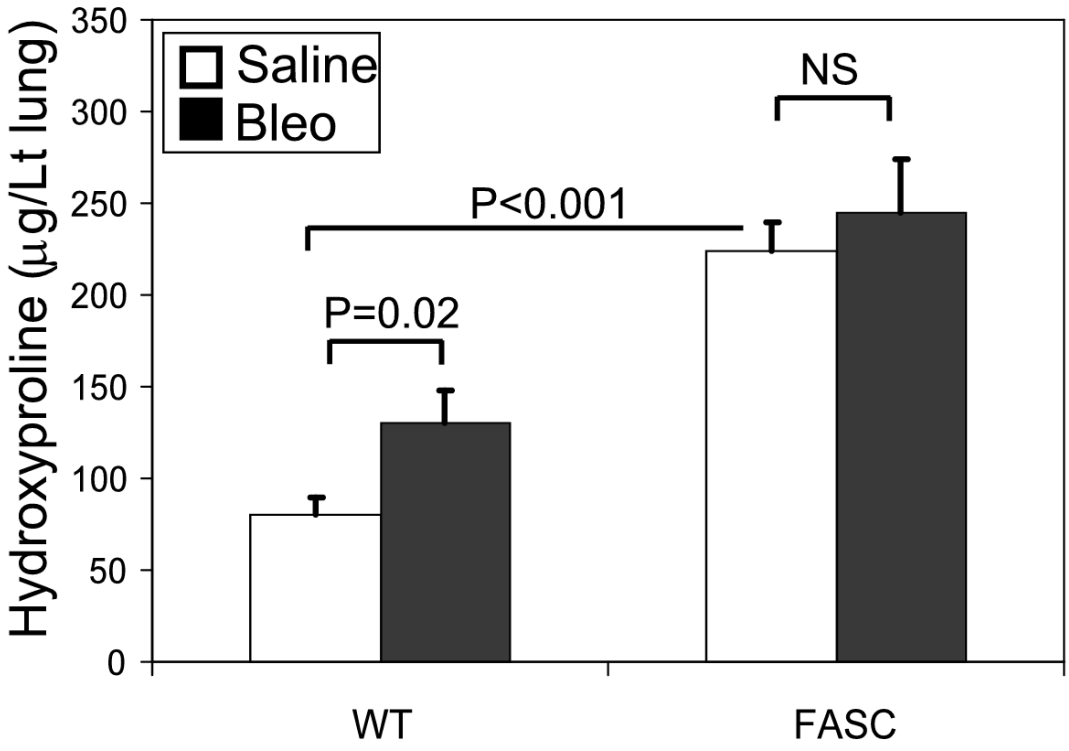
SUPPLEMENTARY MATERIAL:

Supplementary Figure 1



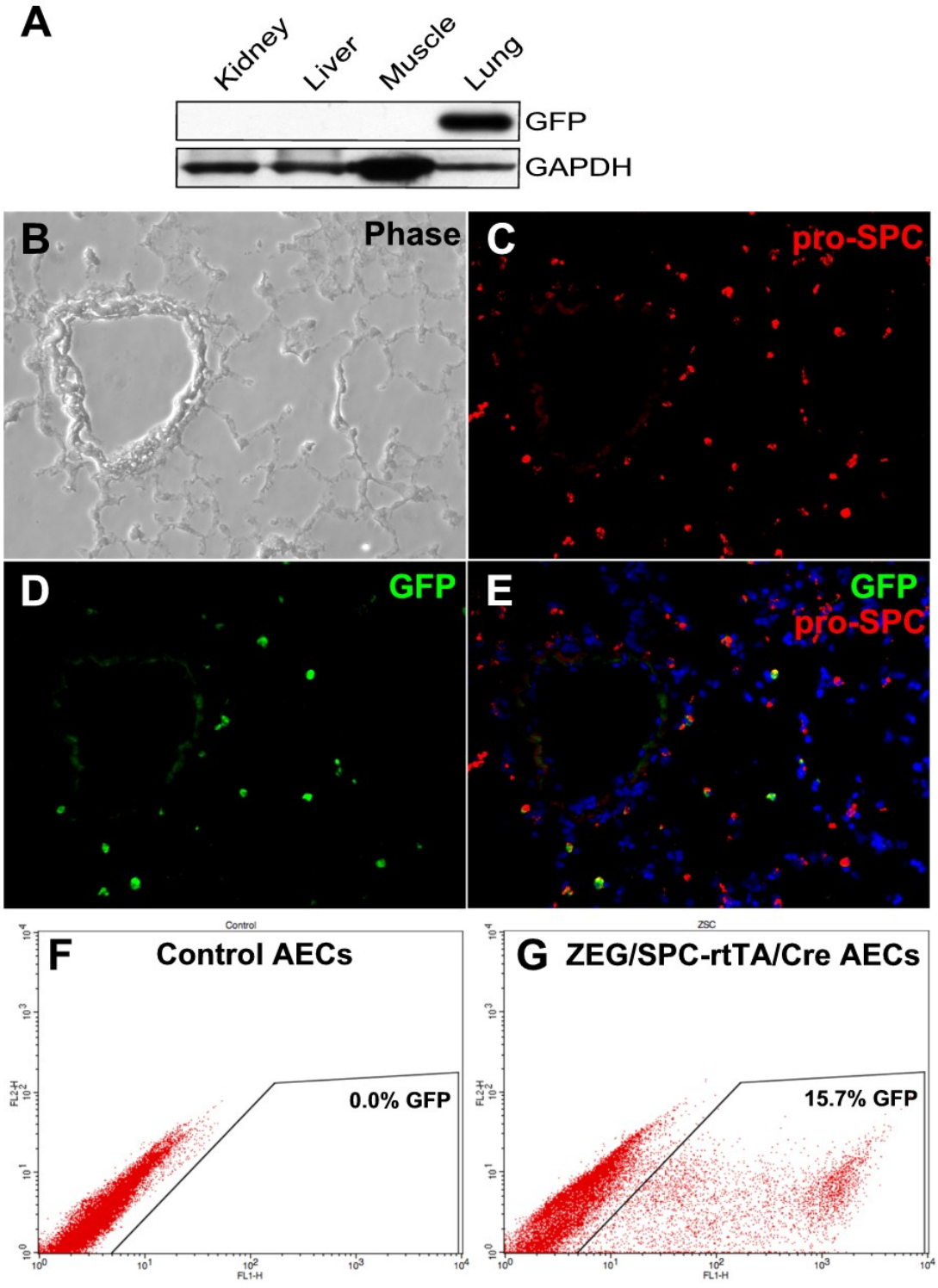
Supplementary Figure 1. Littermate control (A) and FASC (B) lung sections (20x) were immunostained for Ki67 to indicate proliferation. Percentage of Ki67-positive nuclei were quantified from ten 20x fields. For control mice 0.41% of nuclei were Ki67-positive compared to 0.89% in FASC mice.

Supplementary Figure 2



Supplementary Figure 2. Hydroxyproline assay from entire left lung of 6 month old FASC or littermate control mice 21 days after intratracheal saline or bleomycin. Uninjured FASC mice have increased levels of hydroxyproline compared to uninjured control mice. FASC mice have a blunted increase in hydroxyproline after bleomycin (n=7-12 per group).

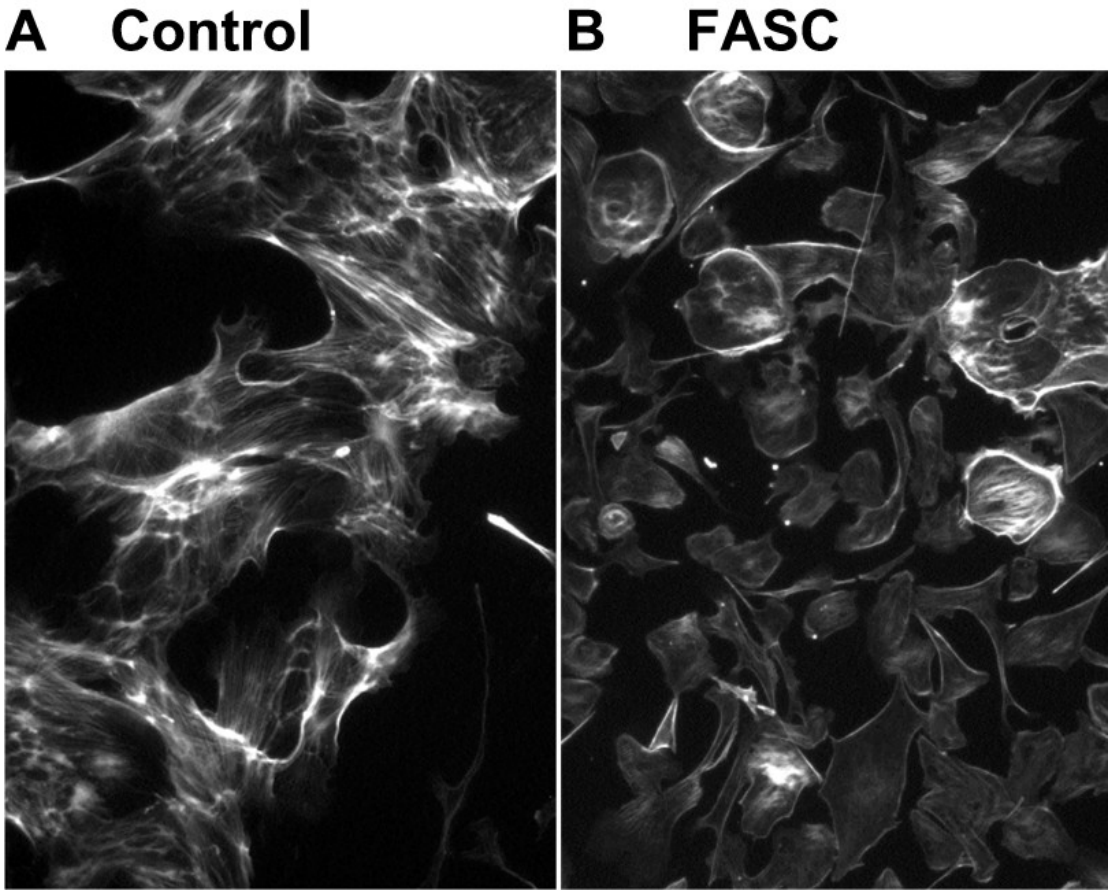
Supplementary Figure 3



Supplementary Figure 3. Triple transgenic mice with lung epithelial specific expression of GFP. **A.** Expression of GFP is limited to the lung as demonstrated

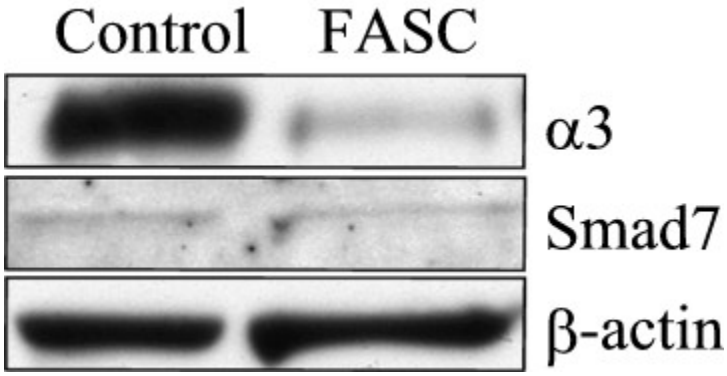
by immunoblot from lysate from triple transgenic mice. **B-E.** Lung sections (20x) from triple transgenic mouse by phase (B) and immunostained for pro-surfactant protein-C (pro-SPC, C), GFP (D) and merged (E). Expression of GFP is limited to a subset of pro-SPC positive lung epithelial cells. **F&G**. GFP expression in isolated alveolar epithelial cells (AECs) of triple transgenic and littermate control mice by flow cytometry. Density plots from control (F) and triple transgenic (G) mice reveal that only ~15% of AECs from triple transgenic mice express GFP. Thus, expression of GFP in triple transgenic ZEG/SPC-rtTA/tetO-Cre mice is limited to lung epithelial cells, but with a low recombination efficiency.

Supplementary Figure 4



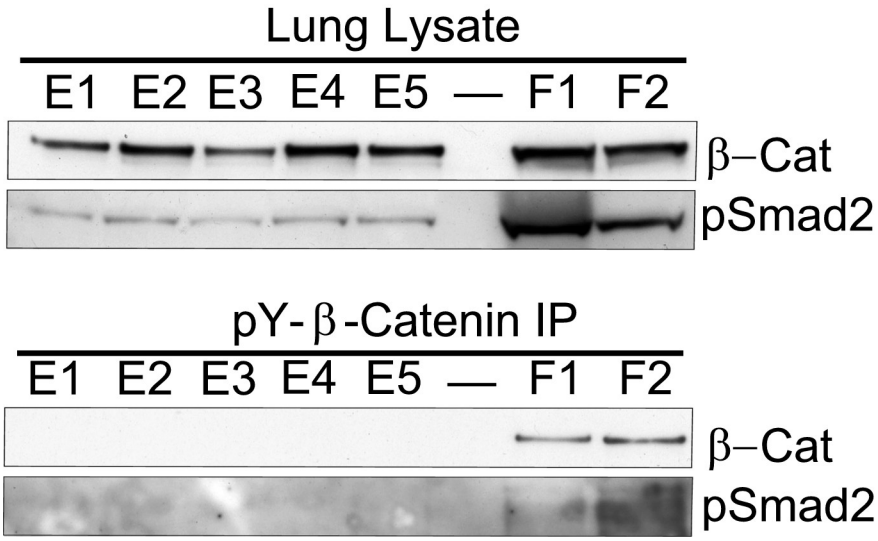
Supplementary Figure 4. Primary alveolar epithelial cells (AECs) from FASC (**B**) and littermate control (**A**) mice were cultured on Fn for four days then stained for F-actin with Phalloidin (20x).

Supplementary Figure 5



Supplementary Figure 5. Primary AECs from FASC or littermate control mice lacking one of the three transgenes were cultured on fibronectin-coated surfaces for four days then analyzed by immunoblot for α3, Smad7 and β-actin. FASC and control AECs have similar levels of Smad7.

Supplementary Figure 6



Supplementary Figure 6. Emphysema lung samples (E1-5) and IPF lung samples (F1-2) were lysed and analyzed by immunoblot and immunoprecipitation for pY654-β-catenin. Tyrosine phosphorylation of β-catenin and pY654-β-catenin co-immunopreciptiation with pSmad2 occurs in IPF, but not emphysema lung samples.