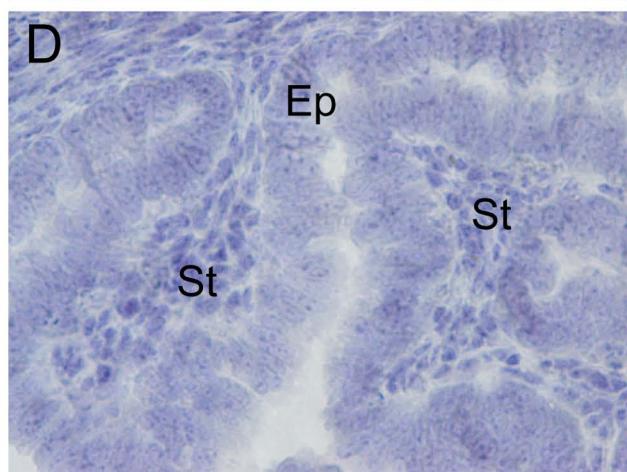
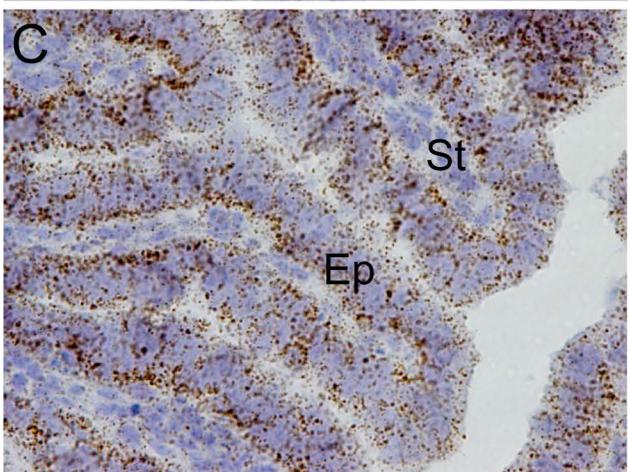
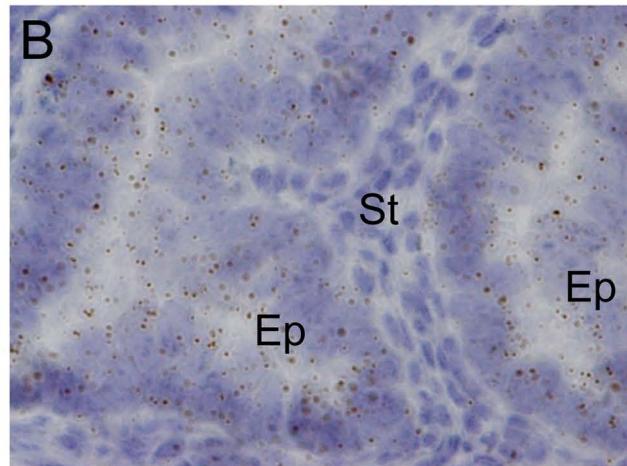
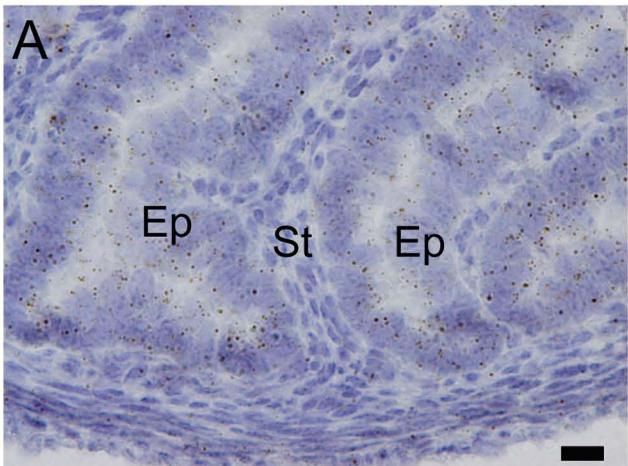


# Supplementary Material, Figure S1

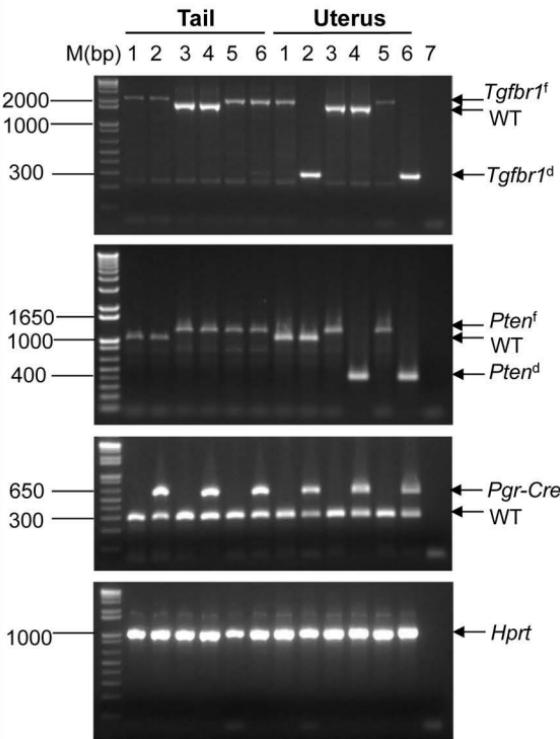
## RNAscope



# Supplementary Material, Figure S2

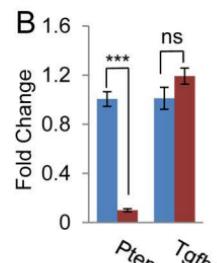
**A**

## Recombination PCR

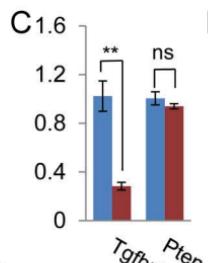


1. *Tgfbr1*<sup>f/f</sup>
2. *Tgfbr1*<sup>d/d</sup>
3. *Pten*<sup>f/f</sup>
4. *Pten*<sup>d/d</sup>
5. *Pten*<sup>f/f</sup>; *Tgfbr1*<sup>f/f</sup>
6. *Pten*<sup>d/d</sup>; *Tgfbr1*<sup>d/d</sup>
7. No template control

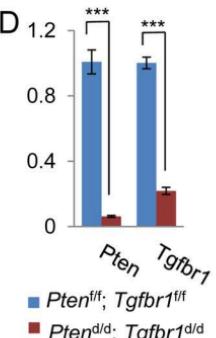
**B**



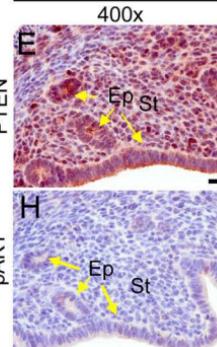
**C**



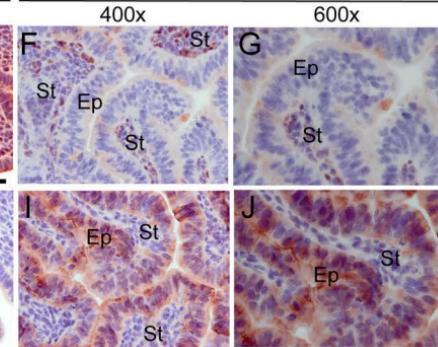
**D**



IHC  
PTEN



IHC  
pAKT



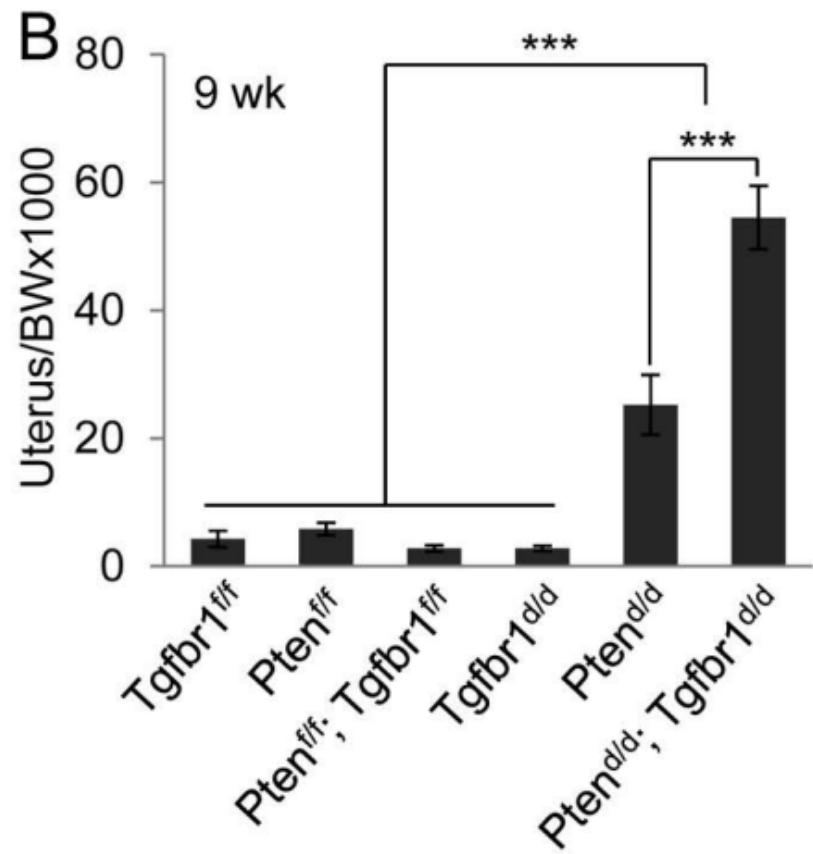
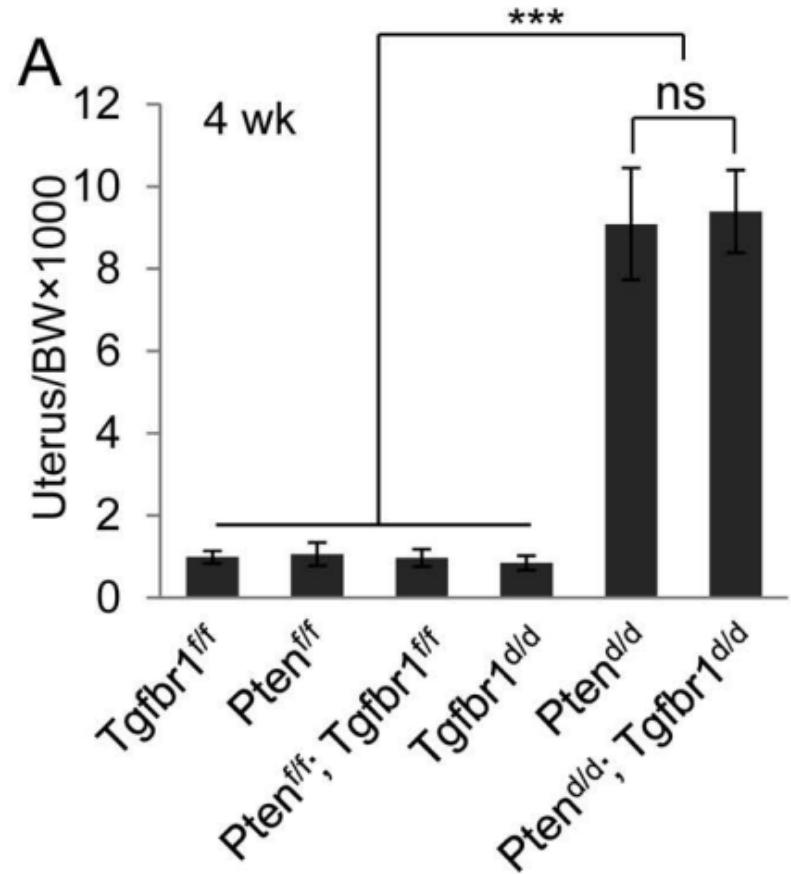
**K**

## Western blot

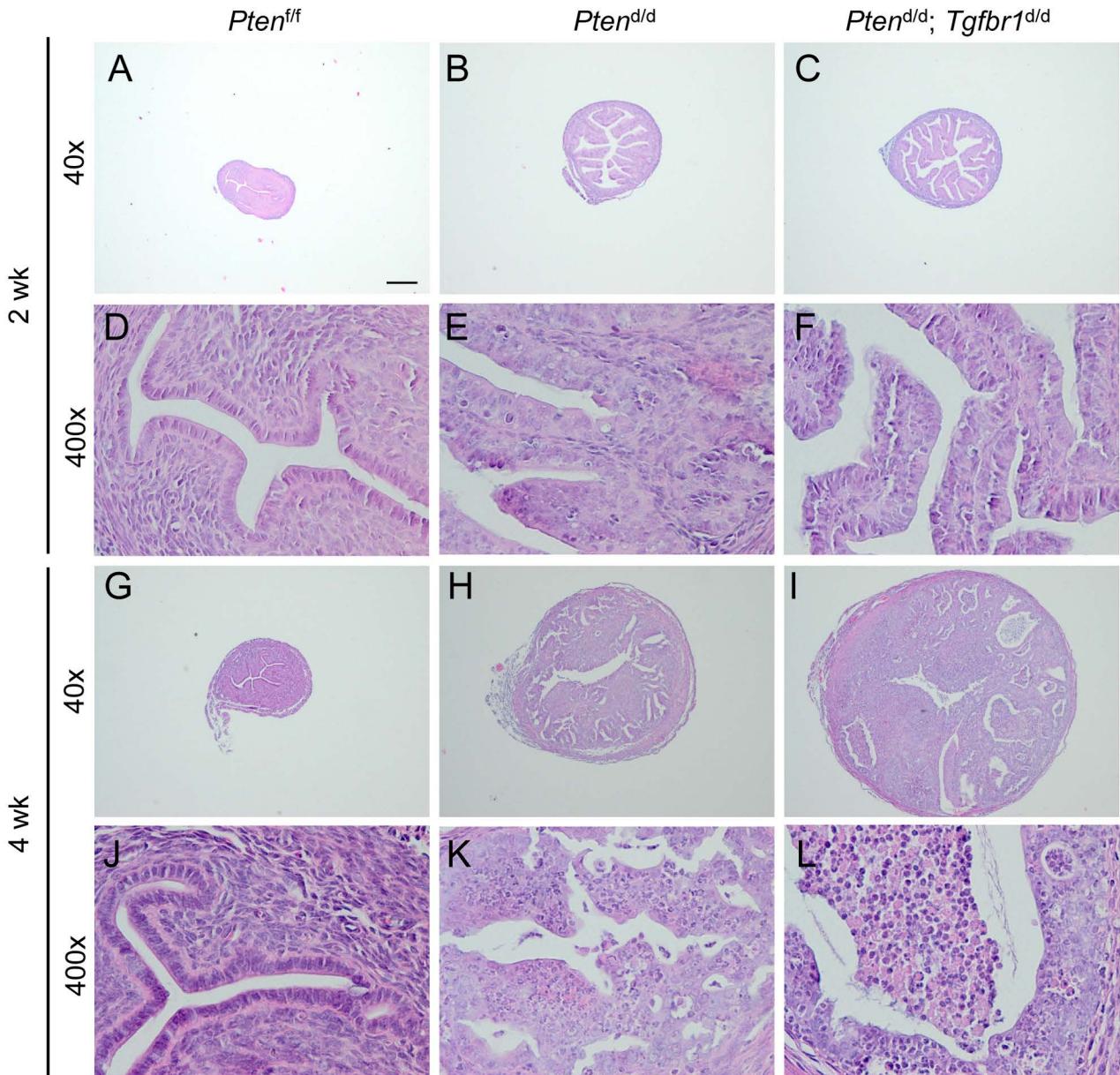


1. *Pten*<sup>f/f</sup>
2. *Tgfbr1*<sup>d/d</sup>
3. *Pten*<sup>d/d</sup>
4. *Pten*<sup>d/d</sup>, *Tgfbr1*<sup>d/d</sup>

## Supplementary Material, Figure S3



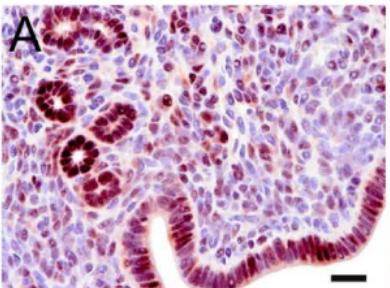
## Supplementary Material, Figure S4



## Supplementary Material, Figure S5

4 wk

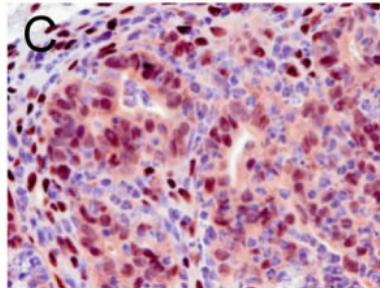
*Pten*<sup>f/f</sup>



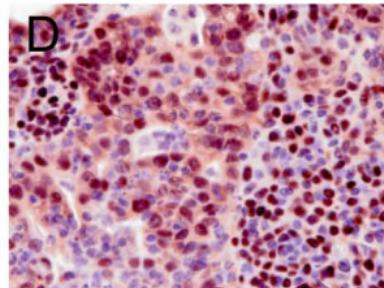
*Pten*<sup>f/f</sup>; *Tgfb1*<sup>f/f</sup>



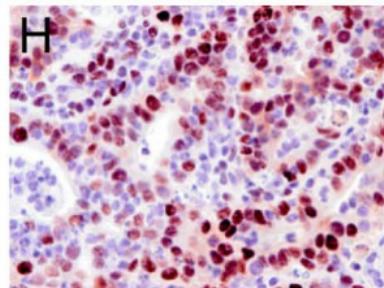
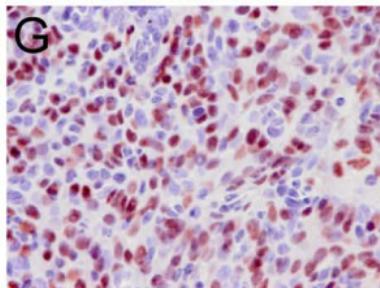
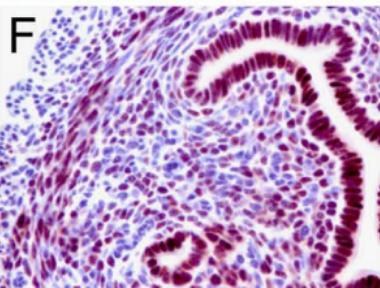
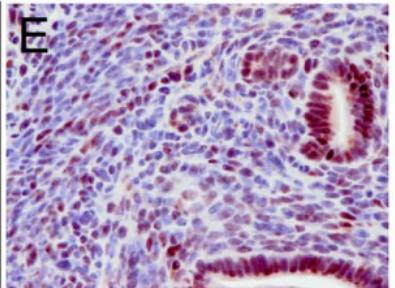
*Pten*<sup>d/d</sup>



*Pten*<sup>d/d</sup>; *Tgfb1*<sup>d/d</sup>



PGR

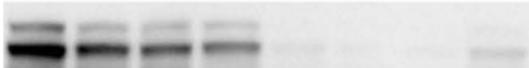


9 wk

*Pten*<sup>d/d</sup>

*Pten*<sup>d/d</sup>; *Tgfb1*<sup>d/d</sup>

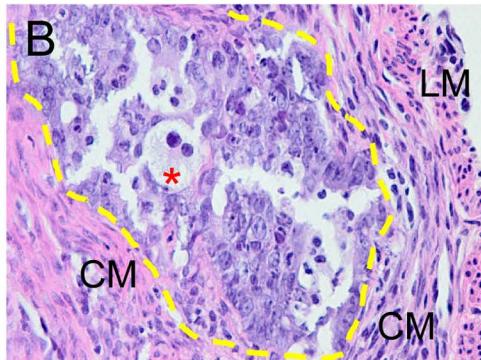
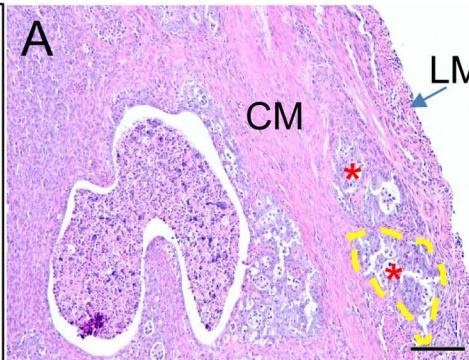
PGR



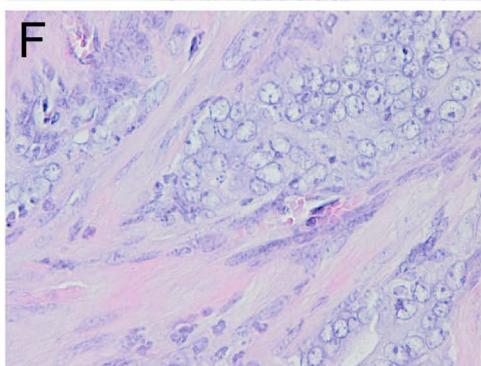
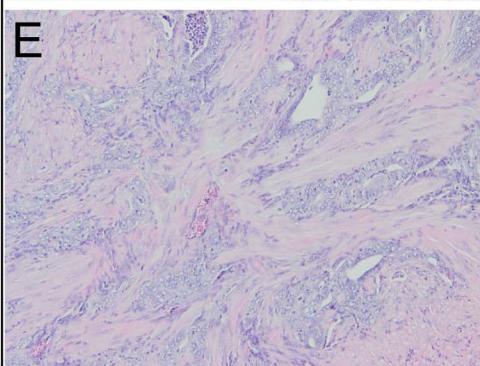
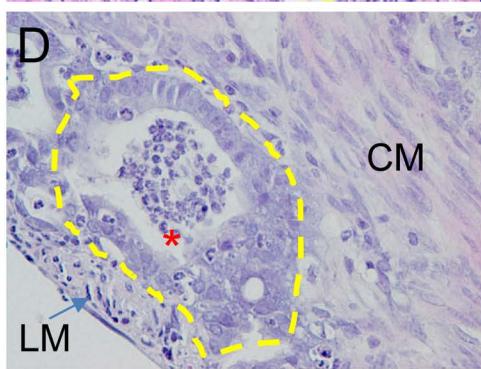
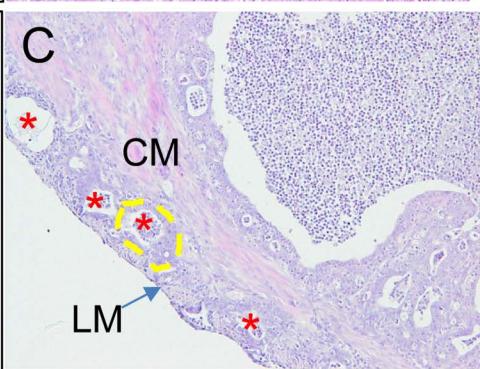
GAPDH

## Supplementary Material, Figure S6

*Pten*<sup>d/d</sup>



*Pten*<sup>d/d</sup>, *Tgfbfr1*<sup>d/d</sup>



# Supplementary Material, Figure S7

*Pten<sup>fl/fl</sup>, Tgfbtr1<sup>fl/fl</sup>*

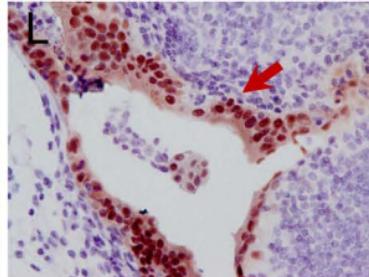
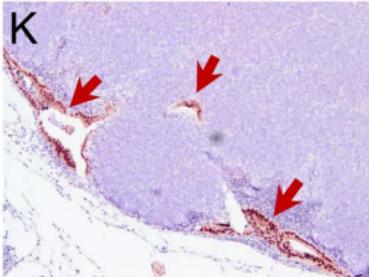
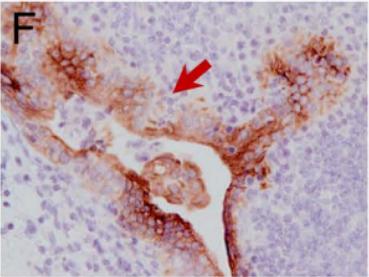
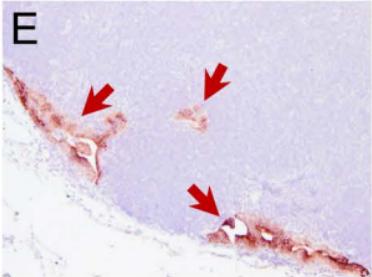
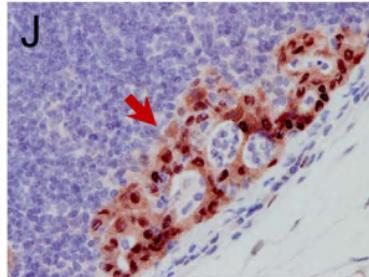
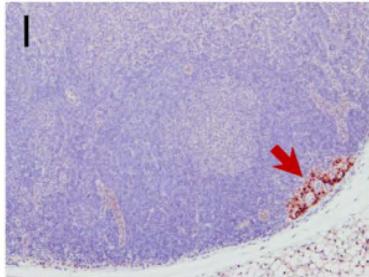
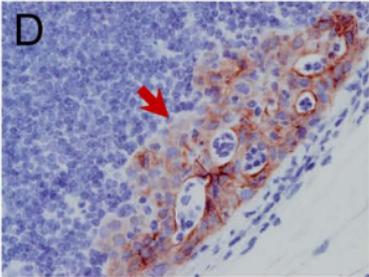
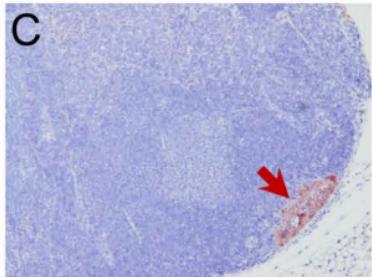
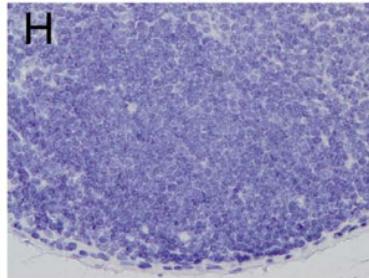
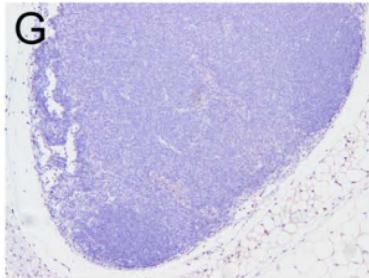
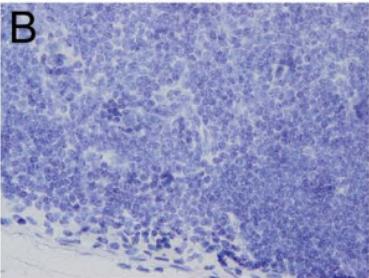
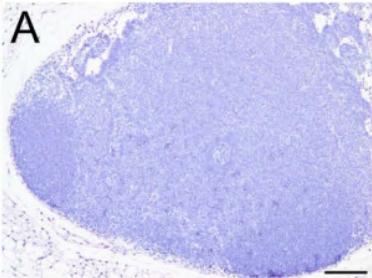
*Pten<sup>d/d</sup>*

*Pten<sup>d/d</sup>, Tgfbtr1<sup>d/d</sup>*

KRT8

100x

400x



ER

# Supplementary Material, Figure S8

**A**

*Pten<sup>f/f</sup>; Tgfbr1<sup>f/f</sup>*



9 wk

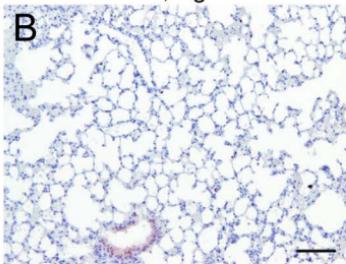
*Pten<sup>d/d</sup>; Tgfbr1<sup>d/d</sup>*



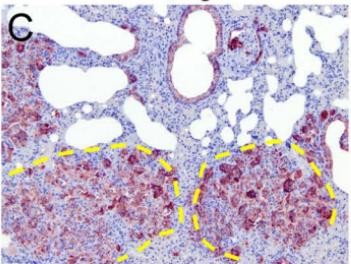
10 mm

**B**

*Pten<sup>f/f</sup>; Tgfbr1<sup>f/f</sup>*

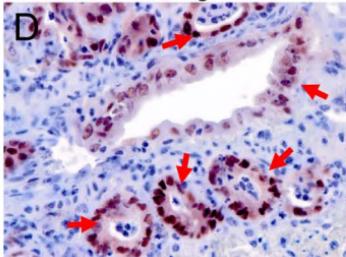


*Pten<sup>d/d</sup>; Tgfbr1<sup>d/d</sup>*



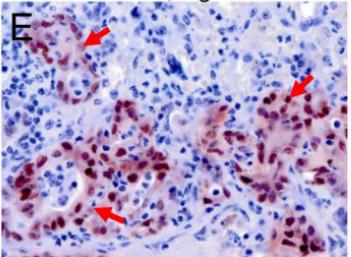
**D**

*Pten<sup>d/d</sup>; Tgfbr1<sup>d/d</sup>*



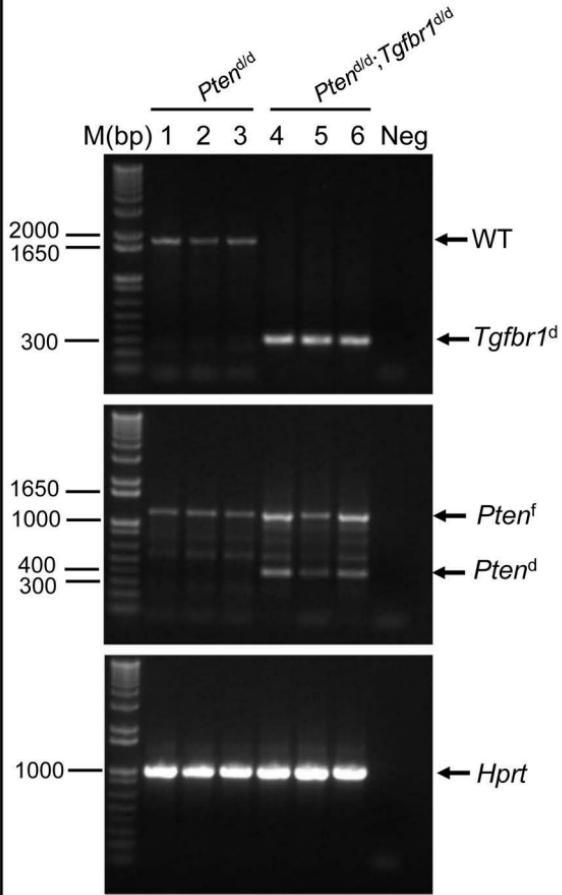
**E**

*Pten<sup>d/d</sup>; Tgfbr1<sup>d/d</sup>*



**F**

DNA recombination/Lung

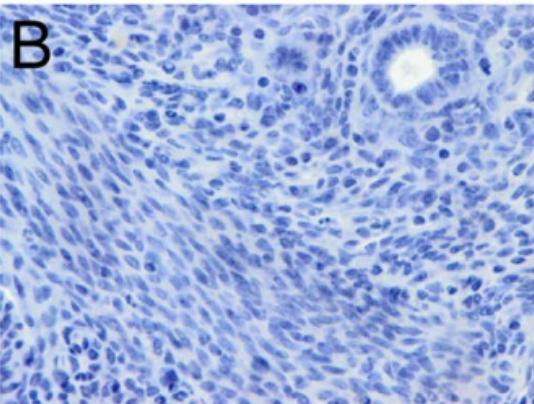
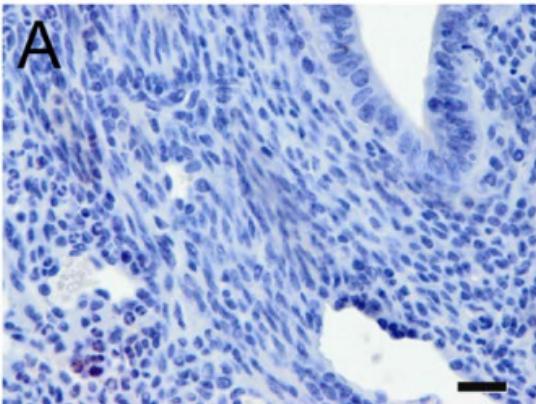


## Supplementary Material, Figure S9

F4/80

CD163

*Pten*<sup>fl/fl</sup>



*Pten*<sup>fl/fl</sup>, *Tgfb1*<sup>fl/fl</sup>

