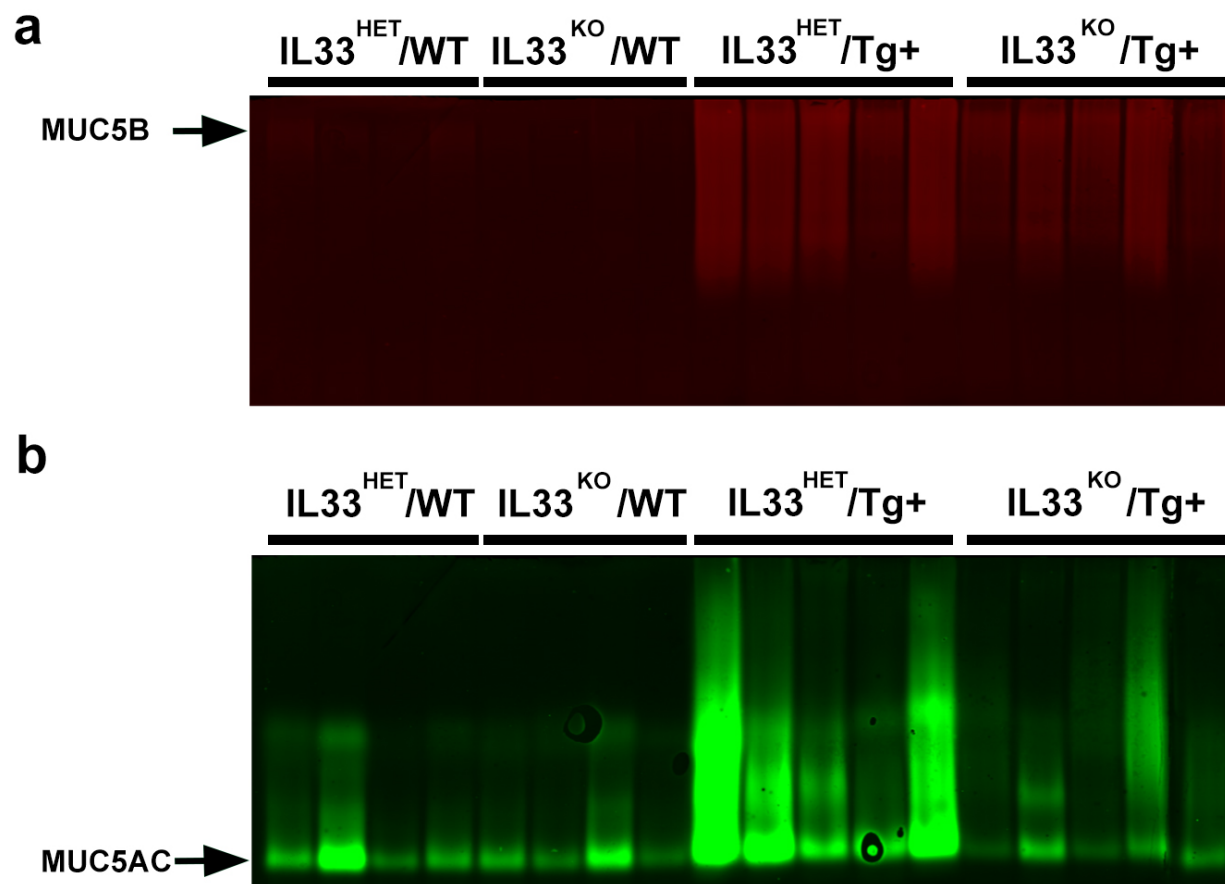


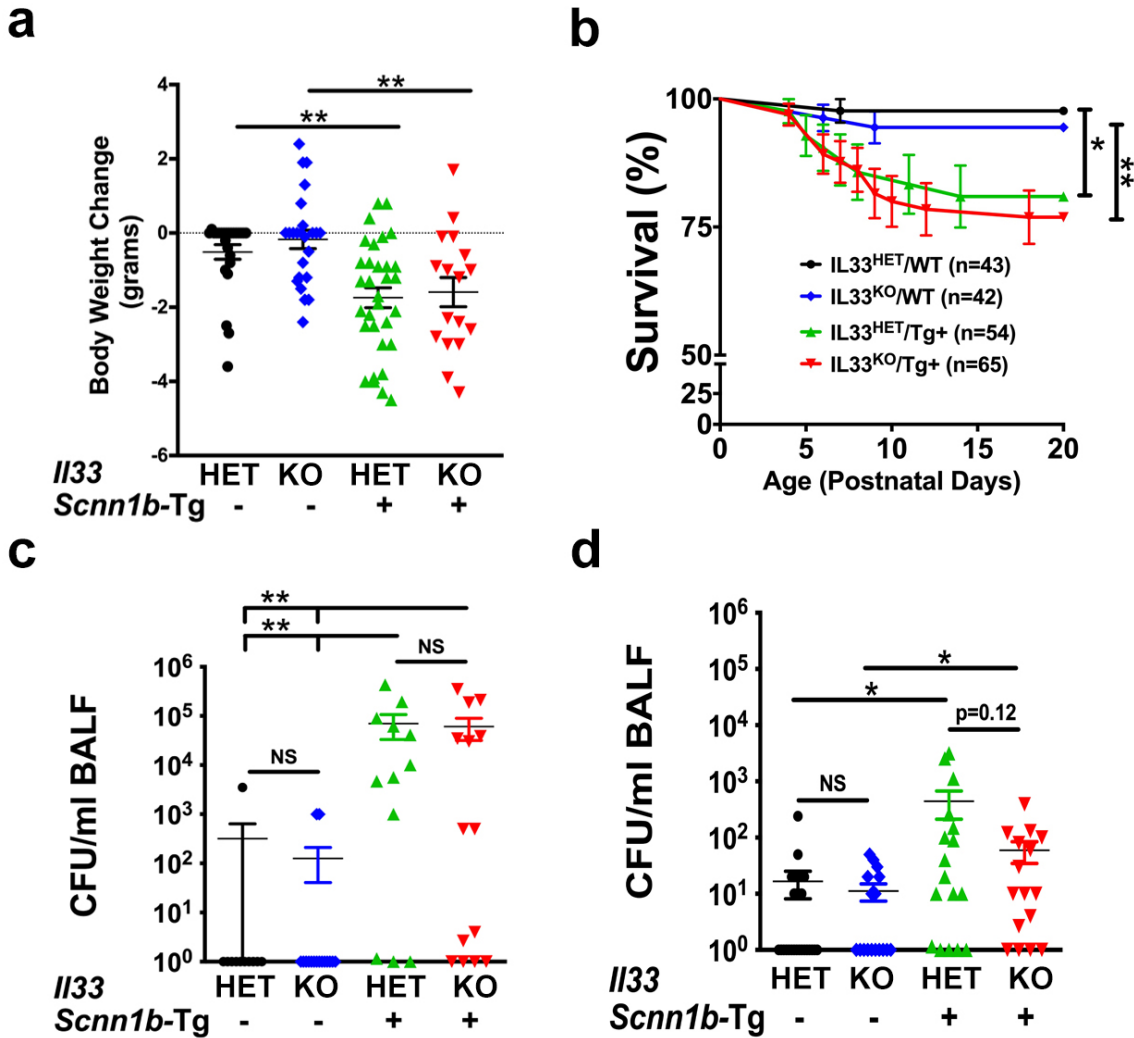
**Supplemental Figure 1**

**Supplemental Figure 1:** Gel image showing genomic DNA bands corresponding to WT and mutated alleles of *I133* gene (**top**). Gel image showing genomic DNA bands corresponding to *Scnn1b* transgene (**bottom**).



**Supplemental Figure 2**

**Supplemental Figure 2: Agarose gel western blots.** Agarose western blot used for quantification of MUC5B (a) and MUC5B (b).



### Supplemental Figure 3

**Supplemental Figure 3: IL33 deficiency does not affect body weight change, neonatal mortality, and spontaneous bacterial infectivity.** (a) Body weight change values represent body weight gain (positive value) or loss (negative value) in gender-matched littermates. The body weights of the healthiest IL33<sup>HET</sup>/WT male or female mice were set to 0. Individual body weight values for other littermates were generated by subtracting body weight of IL33<sup>HET</sup>/WT from body weight of each gender-matched littermates. IL33<sup>HET</sup>/WT (black solid circle), IL33<sup>KO</sup>/WT (blue diamond), IL33<sup>HET</sup>/Tg+ (green triangle), and IL33<sup>KO</sup>/Tg+ neonates (red triangle) (b) Survival curve for the progeny of the crosses between IL33<sup>HET</sup>/WT and IL33<sup>KO</sup>/Tg+ as well as IL33<sup>HET</sup>/Tg+ and IL33<sup>KO</sup>/WT. n= number of pups per genotype. \* $p < 0.05$  (IL33<sup>HET</sup>/WT vs IL33<sup>HET</sup>/Tg+), \*\* $p < 0.01$  (IL33<sup>KO</sup>/WT vs IL33<sup>KO</sup>/Tg+) by log-rank test. IL33<sup>HET</sup>/WT (black curve), IL33<sup>KO</sup>/WT (blue curve), IL33<sup>HET</sup>/Tg+ (green curve), and IL33<sup>KO</sup>/Tg+ neonates (red curve) (c) BALF CFU counts from IL33<sup>HET</sup>/WT (black solid circle), IL33<sup>KO</sup>/WT (blue diamond), IL33<sup>HET</sup>/Tg+ (green triangle), and IL33<sup>KO</sup>/Tg+ neonates (red triangle) (n=11-16 per group). (d) BALF CFU counts from IL33<sup>HET</sup>/WT (black solid circle), IL33<sup>KO</sup>/WT (blue diamond), IL33<sup>HET</sup>/Tg+ (green triangle), and IL33<sup>KO</sup>/Tg+ juveniles (red triangle) (n=16-29 per group). The CFU values were log<sub>10</sub>-transformed with an offset of +1 (log<sub>10</sub>+1). Error bars represent SEM. \* $p < 0.05$ , \*\* $p < 0.01$  using ANOVA followed by Tukey's multiple comparison post hoc test. NS, non-significant; IL33, Interleukin 33; CFU, Colony Forming Unit; BALF, Bronchoalveolar Lavage Fluid.