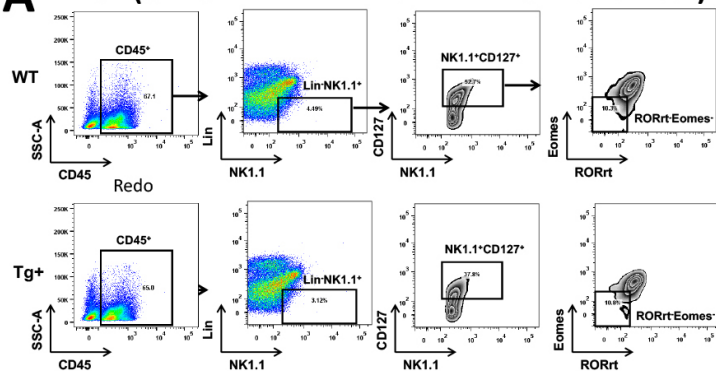


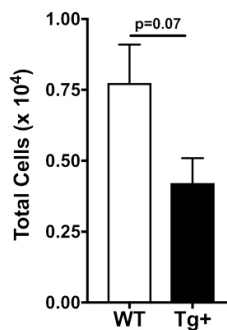
Supplemental Figure 1

Supplemental Figure 1: Scatter plots for isotype antibodies controls for flow cytometric analyses of ILC2 (A, left) and *Th2* cells (A, right) in Figure 1. Total counts for *Th1/Th2* hybrid ($CD3^+CD4^+IL4^+IFN\gamma^+$) cells (B, left) in analyzed single cell suspension from WT (white bar) and Tg+ (black bar) neonates (n=5 of mice per group). Percentage of *Th1/Th2* hybrid cells (B, right) of total lung cells from WT (white bar) and Tg+ (black bar) juveniles. Error bars represent SEM. Student *t* test was used to determine significant difference between WT and Tg+ groups.

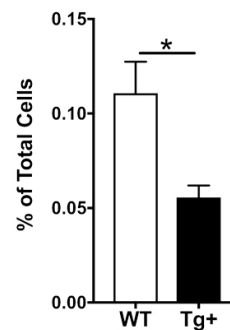
A ILC1 (CD45+Lin-NK1.1+CD127+RORrt-Eomes-)



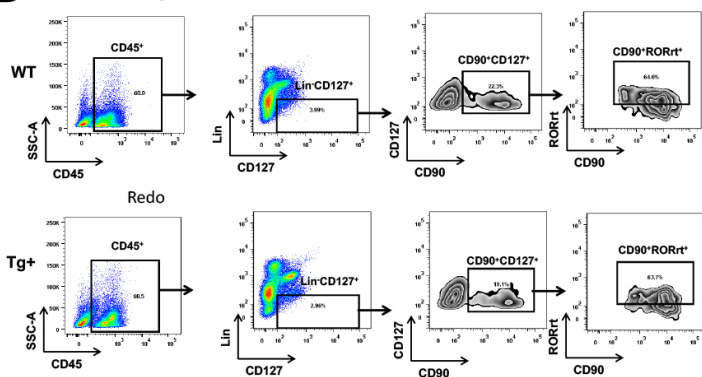
ILC1



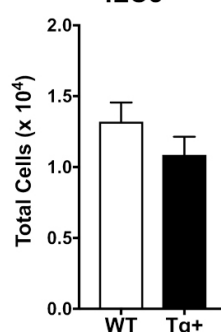
ILC1



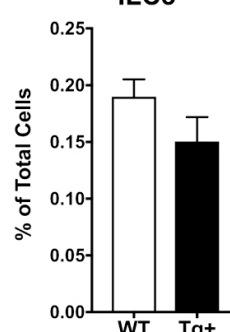
B ILC3 (CD45+Lin-CD127+CD90+RORrt+)



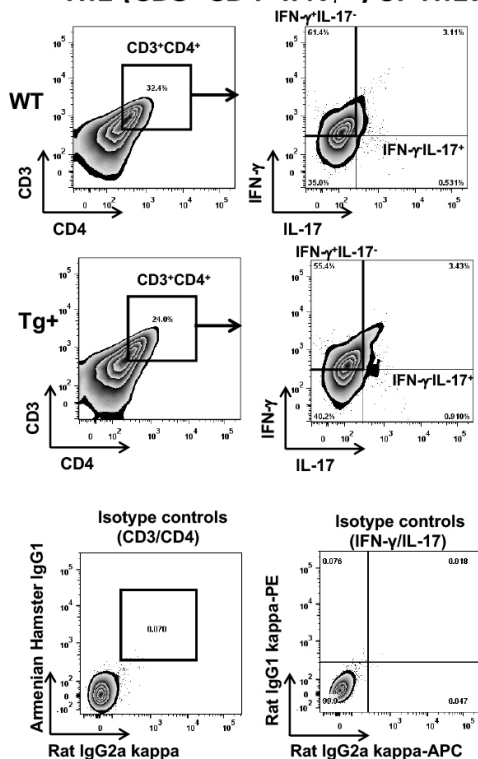
ILC3



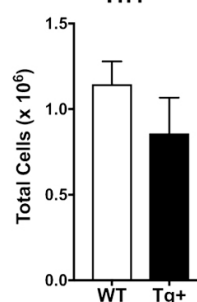
ILC3



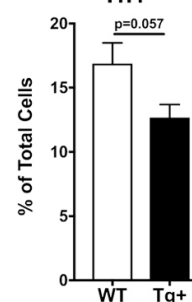
C Th1 (CD3+CD4+IFNγ+) or Th17 (CD3+CD4+IL17+)



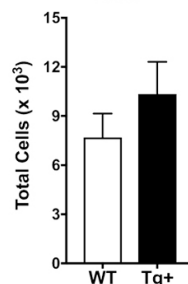
Th1



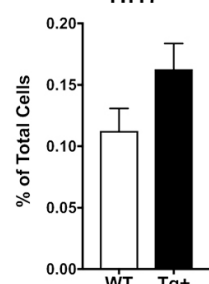
Th1



Th17

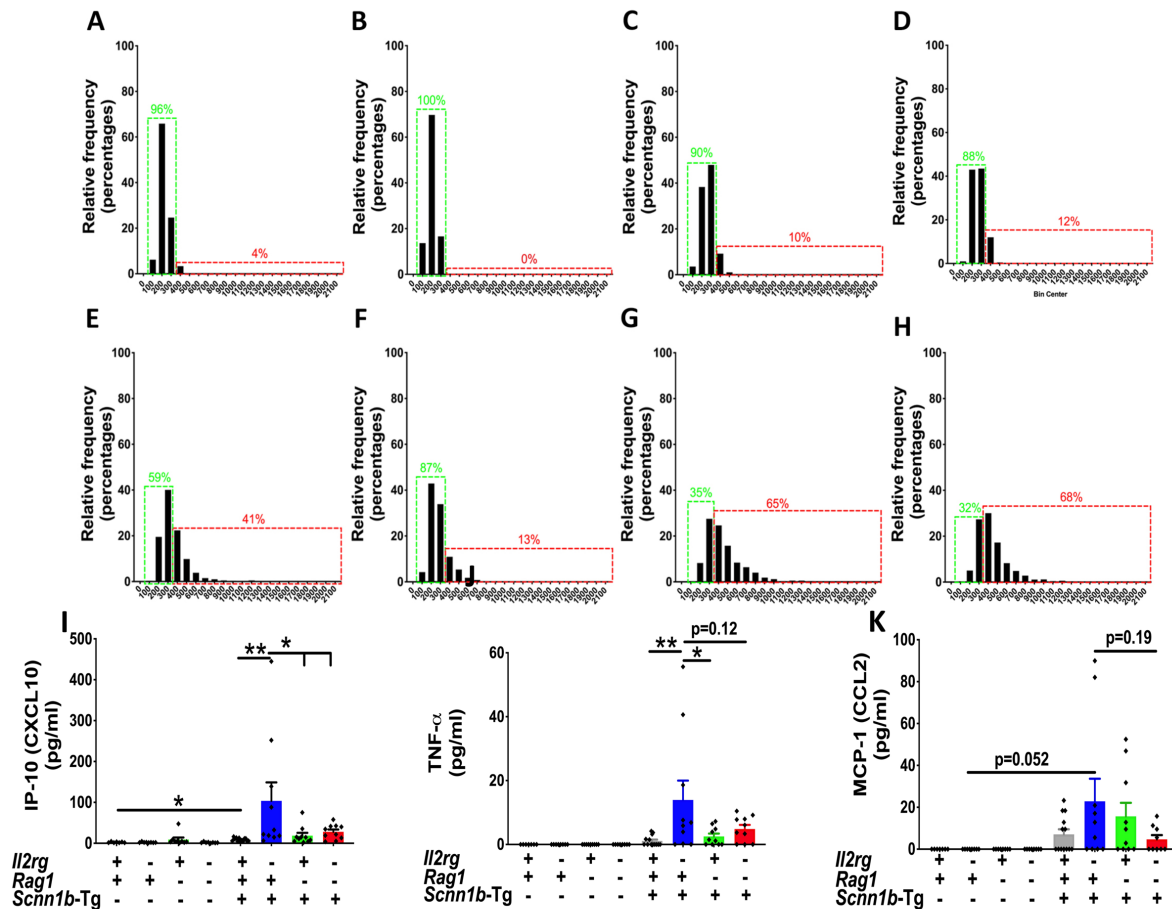


Th17



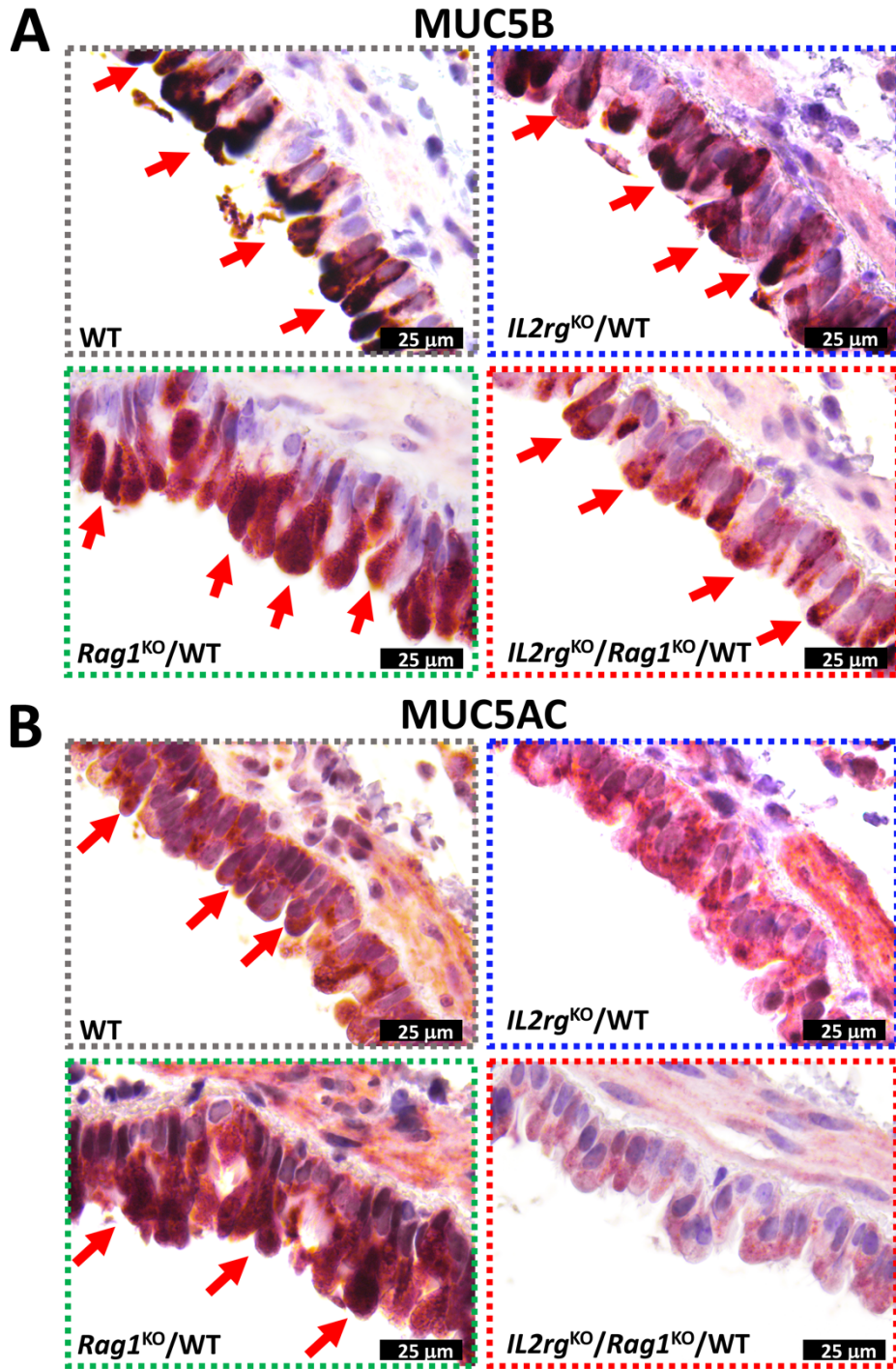
Supplemental Figure 2

Supplemental Figure 2: Immune cell characterization in the lungs of 10-day old WT and Tg+ littermates: Gating Strategy and representative scatter plots for flow cytometric characterization of ILC1 (CD45⁺Lin⁻NK1.1⁺CD127⁺RORrt⁺EOMES⁻) in whole lung single cell suspension from WT (**A**, top panel) and Tg+ neonates (**A**, bottom panel) (n=5 of mice per group). Total counts for ILC1 (**A**, left bar graph) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates (n=5 of mice per group). Percentage of ILC1 (**A**, right bar graph) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates. Error bars represent SEM. **p* < 0.05 analyzed by Student *t* test. Gating Strategy and representative scatter plots for flow cytometric characterization of ILC3 (CD45⁺Lin⁻CD127⁺CD90⁺RORrt⁺) in whole lung single cell suspension from WT (**B**, top panel) and Tg+ neonates (**B**, bottom panel) (n=5 of mice per group). Total counts for ILC3 (**B**, left bar graph) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates (n=5 of mice per group). Percentage of ILC3 (**B**, right bar graph) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates. Gating Strategy and representative scatter plots for flow cytometric characterization of *Th1* (CD3⁺CD4⁺IFN γ ⁺; upper left quadrant) and *Th17* (CD3⁺CD4⁺IL17⁺; lower right quadrant) in analyzed single cell suspension from WT (**C**, top panels) and Tg+ neonates (**C**, bottom panels) (n=5 of mice per group). Total counts for *Th1* (**C**, left bar graph, Top) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates (n=5 of mice per group). Percentage of *Th1* (**C**, right bar graph, Top) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates. Total counts for *Th17* (**C**, left bar graph, Bottom) in whole lung single cell suspension from WT (white bar) and Tg+ (black bar) neonates (n=5 of mice per group). Percent values in the scatter plots indicate the proportion of gated populations. Percentage of *Th17* (**C**, right bar graph, Bottom) of total lung cells from WT (white bar) and Tg+ (black bar) juveniles. Error bars represent SEM. **p* < 0.05 analyzed by Student *t* test. ILC1, Innate lymphoid cell 1, *Th1*, T-helper 1; ILC3, Innate lymphoid cell 3; *Th17*, T-helper 17.



Supplemental Fig. 3

Supplemental Figure 3: Macrophage size distribution of BALF macrophages from immunocompetent WT (A), *Il2rg*^{KO}/WT (B), *Rag1*^{KO}/WT (C), *Il2rg*^{KO}/*Rag1*^{KO}/WT (D), immunocompetent Tg⁺ (E), *Il2rg*^{KO}/Tg⁺ (F), *Rag1*^{KO}/Tg⁺ (G), and *Il2rg*^{KO}/*Rag1*^{KO}/Tg⁺ (H) juveniles (n=5 mice per group). BALF, Bronchoalveolar lavage fluid. Concentration (picograms/ml) of IP-10 (I), TNF- α (J), and MCP-1 (K) in cell-free BALF from immunocompetent WT (open gray bar, n=7), *Il2rg*^{KO}/WT (open blue bar, n=8), *Rag1*^{KO}/WT (open green bar, n=9), *Il2rg*^{KO}/*Rag1*^{KO}/WT (open red bar, n=8), immunocompetent Tg⁺ (solid gray bar, n=13), *Il2rg*^{KO}/Tg⁺ (solid blue bar, n=10), *Rag1*^{KO}/Tg⁺ (solid green bar, n=10), and *Il2rg*^{KO}/*Rag1*^{KO}/Tg⁺ (solid red bar, n=10) juveniles. Error bars represent SEM. ANOVA followed by Tukey's multiple comparison post-hoc test. **p*<0.05; ***p*<0.01. IP-10, Interferon gamma induced protein-10; TNF- α , Tumor necrosis factor- α ; MCP-1, Monocyte chemoattractant protein-1.



Supplemental Fig. 4

Supplemental Figure 4: (A) Representative photomicrographs of MUC5B stained lung sections from immunocompetent WT, $IL2rg^{KO}/WT$, $Rag1^{KO}/WT$, and $IL2rg^{KO}/Rag1^{KO}/WT$ juveniles. (B) Representative photomicrographs of MUC5AC stained lung sections from immunocompetent WT, $IL2rg^{KO}/WT$, $Rag1^{KO}/WT$, and $IL2rg^{KO}/Rag1^{KO}/WT$ juveniles.