

## Supplemental Figure 1. Detection of different cell populations in the lungs and spleens of PPARγ<sup>fl/fl</sup> and CD11c-Cre-PPARγ<sup>fl/fl</sup> mice.

(A) Semi-quantitaitve RT-PCR showing cre-mediated deletion of exons 1 and 2 in the PPAR $\gamma$  gene in CD11c<sup>+</sup> cells from PPAR $\gamma^{fl/fl}$  (Lane A) and CD11c-Cre-PPAR $\gamma^{fl/fl}$  (Lane B) mice (primers: forward 5'-AGCGGTGAACCACTGATATTC-3' & reverse 5'-TTCAATCGGATGGTTCTTCGG-3)'. Arrows indicate the full (500 bp) and recombined (370 and 130 bp) RT-PCR products. (B) Western blot analysis and associated densitometry of PPAR $\gamma$  protein in sorted lung CD11c<sup>+</sup> and CD11c<sup>-</sup> cells from PPAR $\gamma^{fl/fl}$  (Lane A) and CD11c-Cre-PPAR $\gamma^{fl/fl}$  (Lane B) mice. (C) Total cell yields from spleen and lungs. (D and E) Flow cytometry-based identification and enumeration of various lymphoid and myeloid cell populations in the (D) spleen and (E) lung. All data are representative of two independent experiments and combined as mean ± SD. \*P< 0.05, NS= not significant.



## Supplemental Figure 2. PPARy deletion in CD11c<sup>+</sup> cells potentiates lung inflammation.

(A) Inflammation was scored semi-quanitatively in five small and four large airways of PAS stained lung sections of naïve (4), PPAR $\gamma^{fl/fl}$  (4) and CD11c-Cre-PPAR $\gamma^{fl/fl}$  (3) mice from two independent experiments, subjected to indicated conditions. Data shown as mean± SEM. Inflammation scoring criteria (peribronchial): 0=no cellular inflammation, 1=few cells; cuffing, 2=1-5 rings of cells surrounding airway and 3=5 rings of cells surrounding structure. (**B**) BAL cell differential counts for macrophages in CD11c-Cre-PPAR $\gamma^{fl/fl}$  and PPAR $\gamma^{fl/fl}$  mice subjected to the indicated condition. (C) Gating strategy for lung CD4<sup>+</sup> T cells. Based on the light scatter properties and expression of CD11c and CD4 surface marker, lung CD4<sup>+</sup> T cells were identified as CD4<sup>+</sup>SSC<sup>lo</sup> cells. (**D**) IL-13 and IL-5 expression in lung CD4<sup>+</sup> T cells from mice subjected to the indicated conditions. Data shown are representative of two independent experiments; symbols in the graphs represent data from individual mice (n=3 mice/group), horizontal lines represent mean and error bars denote SEM. (E) Expression of transcription factors RORyt, GATA-3 and T-bet in lung CD4+ T cells from PPARyfl/fl and CD11c-Cre-PPAR $\gamma^{\text{fl/fl}}$  mice (n=6) subjected sequentially to tolerance and inflammation models. Numbers shown represent mean fluorescence intensities (MFIs). (F) Expression of MHCII, CD80 and CD86 on different CD11c<sup>+</sup> subsets shown as mean  $\pm$  SD of MFIs assessed by flowcytometry. \*P< 0.05, \*\*P<0.01, NS=not significant.