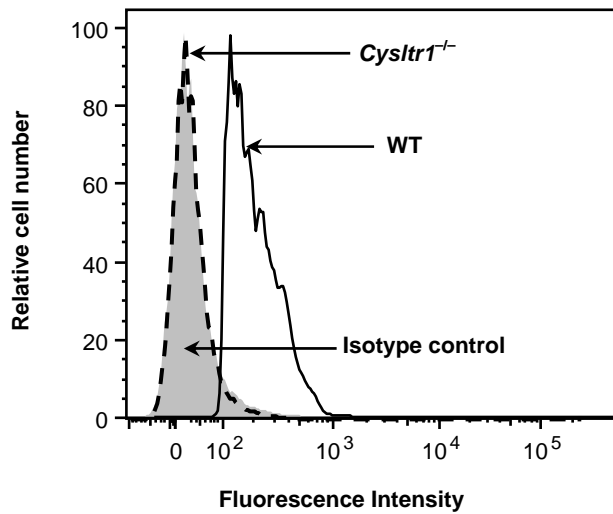


Fig. S1. GPR17 deficiency increases CysLT₁R-mediated *Df*-induced pulmonary inflammation. (A) Further histologic analyses of the lung samples shown in Figure 1B stained with Congo red (CR) or periodic acid-Schiff (PAS). Scale bars = 50 μm for CR and 100 μm for PAS. Arrows in CR panels depict eosinophils in the bronchovascular bundles. (B) Quantitative analysis of vascular smooth muscle cell numbers (left) and thickness (right). The mean number of α-smooth muscle actin-positive cells per 100-μm basement membrane (BM) and the mean thickness of the medial arteriolar walls in lung sections of PBS-injected (white columns) or *Df*-challenged (black columns) mice are shown. Results are the mean ± SEM (*n* = 3-5 mice per group) from 2 of the experiments depicted in Figure 1B. **P* < 0.01.

A



B

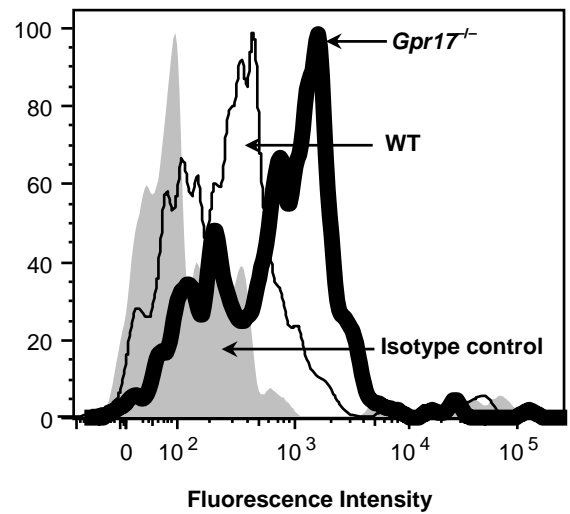


Figure S2. Flow cytometry for CysLT₁R in peritoneal MΦs. Adherent cells from peritoneal lavage fluid of resting WT (solid line) and *Cyslt1*^{-/-} (dotted line) mice (A) or of resting WT (thin line) and *Gpr17*^{-/-} (thick line) mice (B) were incubated with polyclonal rabbit anti-CysLT₁R IgG (RB34, 5 μg/ml) and allophycocyanin-conjugated donkey anti-rabbit IgG. Nonspecific rabbit IgG was used as a control (shaded histogram).

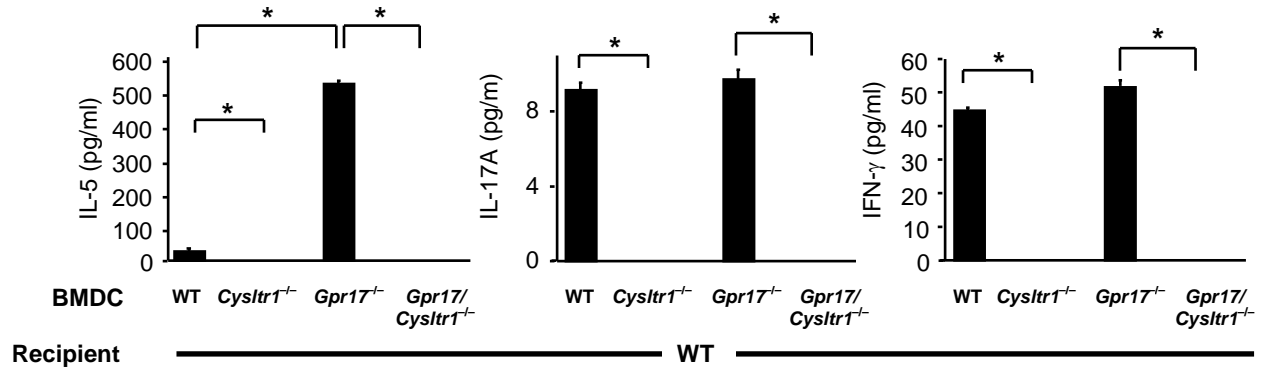


Figure S3. Cytokine production after ex vivo restimulation with *Df*. Parabronchial LN cells harvested from WT recipients depicted in Figure 5 were counted and restimulated with *Df* for 72 h. The concentrations of IL-5, IL-17A, and IFN- γ in the culture supernatants are shown as the mean \pm SE ($n = 12-15$). * $p < 0.01$.

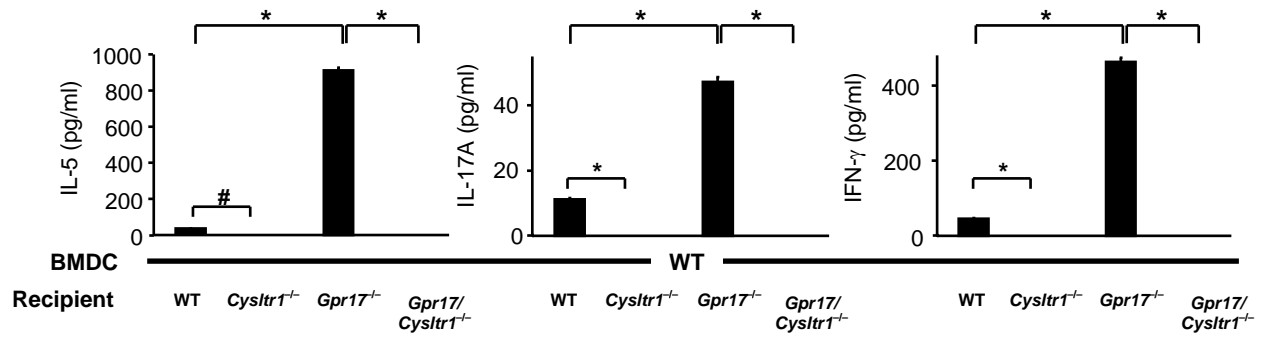


Figure S4. Cytokine production after ex vivo restimulation with *Df*. Parabronchial LN cells harvested from WT, *Cysltr1*^{-/-}, *Gpr17*^{-/-}, and *Gpr17/Cysltr1*^{-/-} recipients depicted in Figure 6 were counted and restimulated with *Df* for 72 h. The concentrations of IL-5, IL-17A, and IFN-γ in the culture supernatants are shown as the mean ± SE ($n = 5-12$). * $p < 0.01$, # $p < 0.05$.

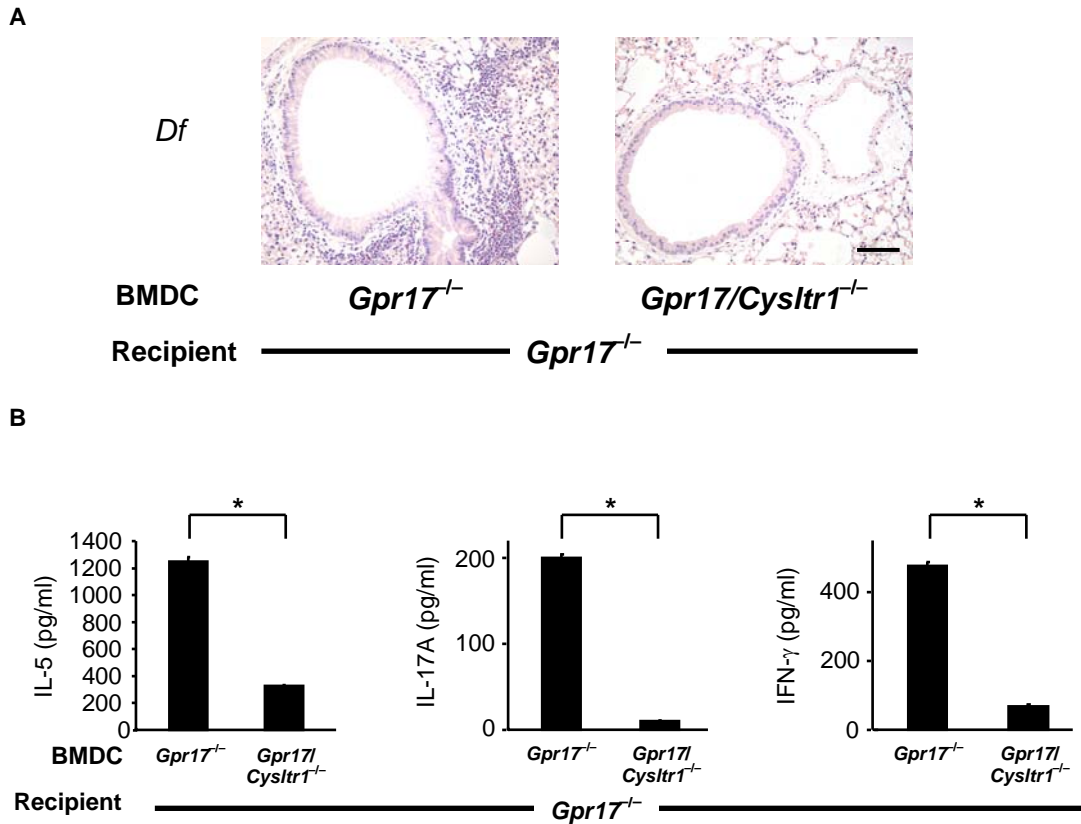


Figure S5. Effects of sensitization by adoptive transfer of *Df*-pulsed BMDCs from $Gpr17^{-/-}$ and $Gpr17/Cysltr1^{-/-}$ mice into $Gpr17^{-/-}$ recipients and subsequent challenge. (A) Histologic analyses of the lung from mice depicted in Figure 7 stained by hematoxylin and eosin. Scale bars = 100 μ m. (B) Cytokine production after ex vivo restimulation with *Df*. Parabronchial LN cells harvested from $Gpr17^{-/-}$ recipients depicted in Figure 7 were counted and restimulated with *Df* for 72 h. The concentrations of IL-5, IL-17A, and IFN- γ in the culture supernatants are shown as the mean \pm SE ($n = 10$). * $p < 0.01$.