Blockade of IL-33 release, and suppression of type 2 innate lymphoid cell responses, by helminth secreted products in airway allergy

Henry J McSorley et al.

Supplementary Material

Supplementary Figure 1

Complete cell profile of BAL (some data are also in Figure 1). Supp Figure 1: Bronchoalveolar lavage cells (A) and lung tissue cells (B) were treated with Alternaria, OVA and HES as described in Figure 1. Numbers of eosinophils (Siglecf+CD11c-), Neutrophils (CD11b+GR1+), alveolar macrophages (CD11c+Siglecf+) and Thelper cells (CD4+) were then assessed by flow cytometry. *** = p<0.001, ** = p<0.01, * = p<0.05, when Alt-OVA-HES:OVA groups was compared to Alt-OVA:OVA groups was compared to Alt-OVA:PBS group.

Supplementary Figure 2

Gating strategy for type II Innate Lymphoid Cells (ILC2), and representative plots of IL-4, IL-5 and IL-13 staining on ILC2s after 4 h PMA/Ionomycin/BrefeldinA stimulation.

Supplementary Figure 3

DO11.10 cells were transferred, and the *Alternaria*/OVA model carried out as described in **Fig. 2 H-J**. Absolute numbers of lymph node (LN) (**A**) and lung (**C**), or proportions of lung (**B**) IL-4+CD4+KJ126+ were calculated.

Supplementary Figure 4

Absolute lung eosinophil cell numbers were calculated from mice deficient in RAG (A), IL-17RB (B), IL-17RBxST2 (C), MyD88xTRIF (D) or TLR4 (E) or wild-type controls shown in Fig. 3.

Supplementary Figure 5

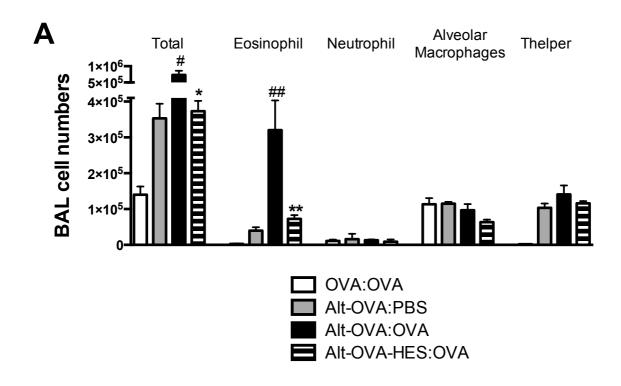
Representative staining for CD44 and CD25 in IL-13-GFP+Lineage- cells after treatment with *Alternaria* +/- HES, as described in **Fig. 4 B**.

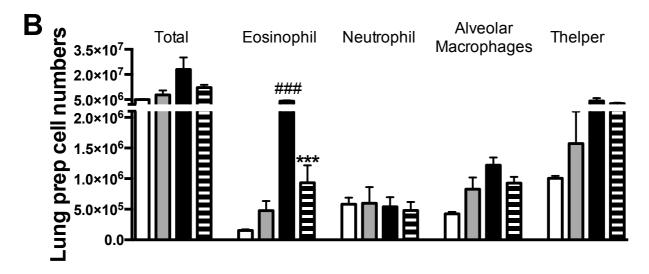
Supplementary Figure 6

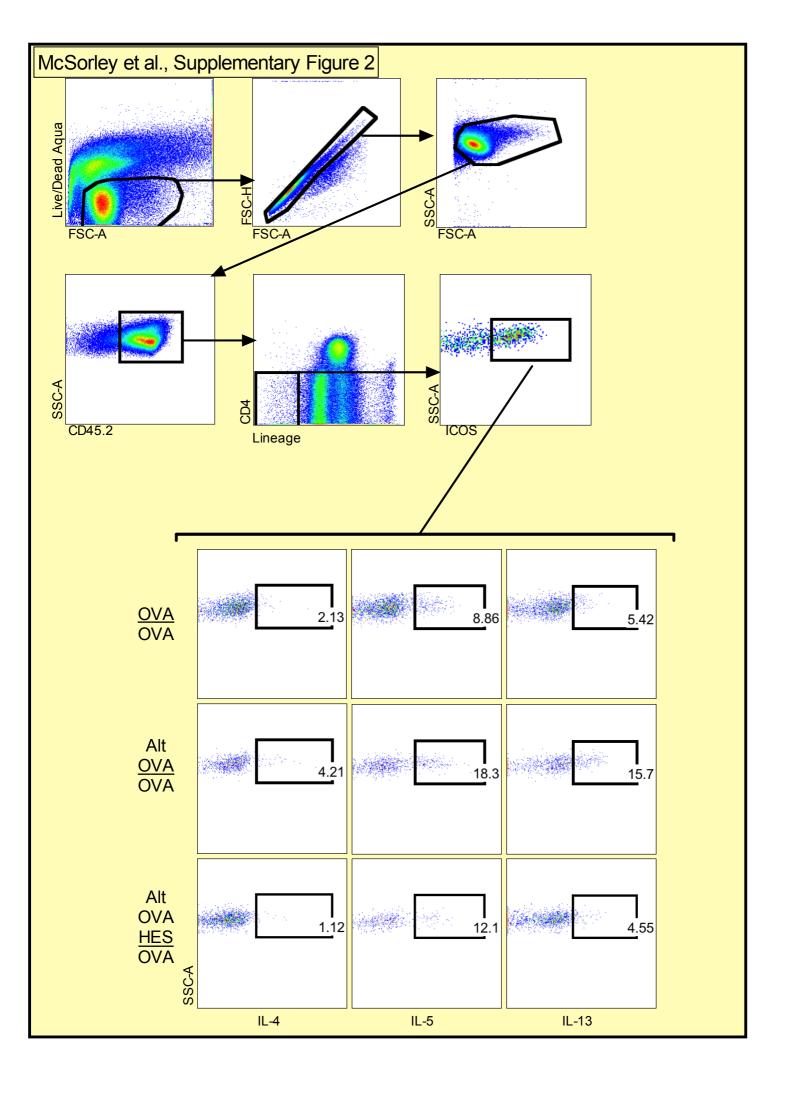
48 h after *Alternaria* administration with or without HES to C57BL/6 wild-type or RAG-deficient mice, cell-free BAL fluid was tested for levels of IL-5 (**A**), RELMα (**B**) and Ym1 (C). Significance compares *Alternaria* level to *Alternaria* + HES level.

Supplementary Figure 7

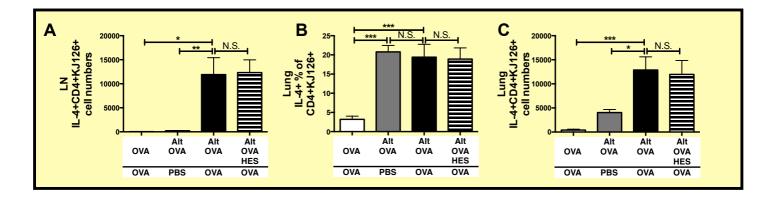
Gating strategy and representative plots for IL-33-Citrine mice treated with *Alternaria*, OVA and HES as described in **Fig. 5 G**.





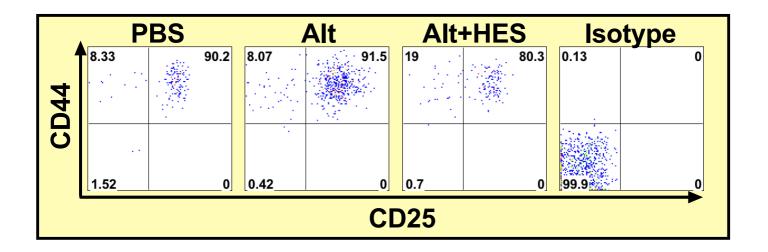


McSorley et al., Supplementary Figure 3



McSorley et al., Lung eosinophils (x10⁵) 은 약 후 RAG-/-BALB/c Supplementary Figure 4 Alt Alt OVA OVA OVA OVA PBS OVA Alt Alt OVA OVA OVA OVA PBS OVA **B** Lung eosinophils (x10⁵) IL-17RB-/-BALB/c Alt Alt Alt OVA OVA OVA Alt Alt Alt OVA OVA OVA OVA OVA PBS OVA OVA OVA PBS OVA OVA BALB/c IL-17RB Lung eosinophils (x10⁵) ST2 -/-40-Alt Alt Alt OVA OVA OVA OVA HES OVA PBS OVA OVA Alt Alt Alt OVA OVA OVA HES OVA PBS OVA OVA C57BL/6 MyD88xTRIF-/-Lung eosinophils (x10⁵) 20 AIT AIT AIT OVA OVA OVA HES OVA PBS OVA OVA Alt Alt Alt OVA OVA OVA OVA OVA PBS OVA OVA TLR4-/-Lung eosinophils (x10⁵) C57BL/6 Alt Alt
OVA OVA OVA
HES
OVA OVA OVA Alt OVA HES Alt OVA OVA OVA OVA OVA

McSorley et al., Supplementary Figure 5



McSorley et al., Supplementary Figure 6

