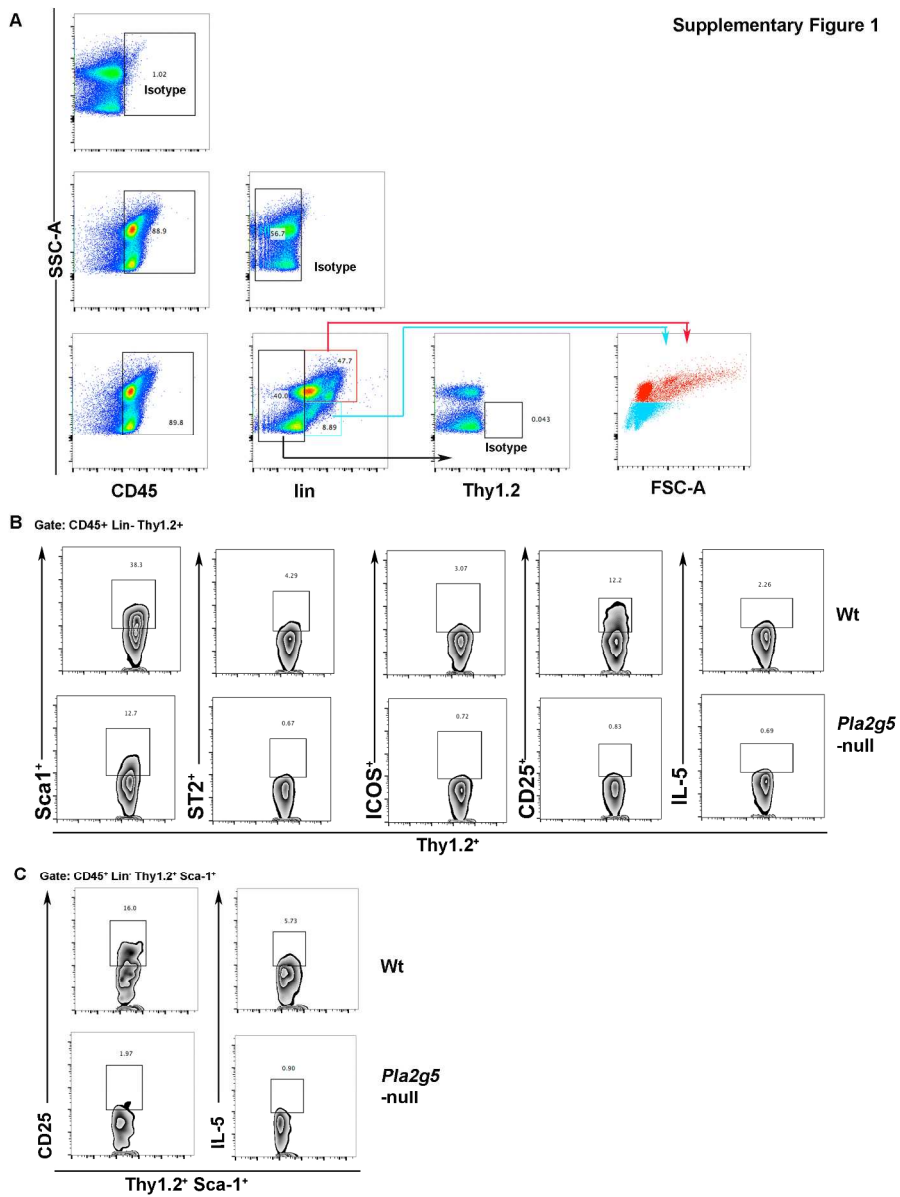
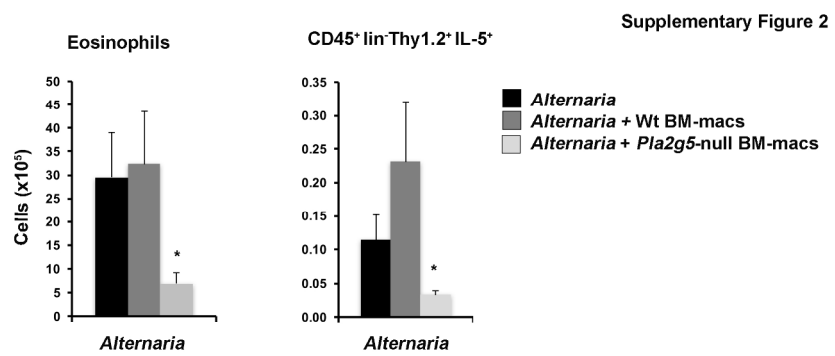


Supplementary Figure 1

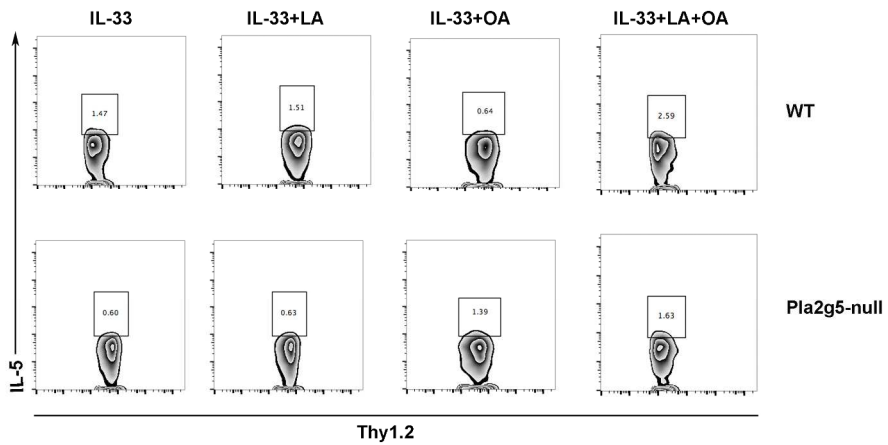


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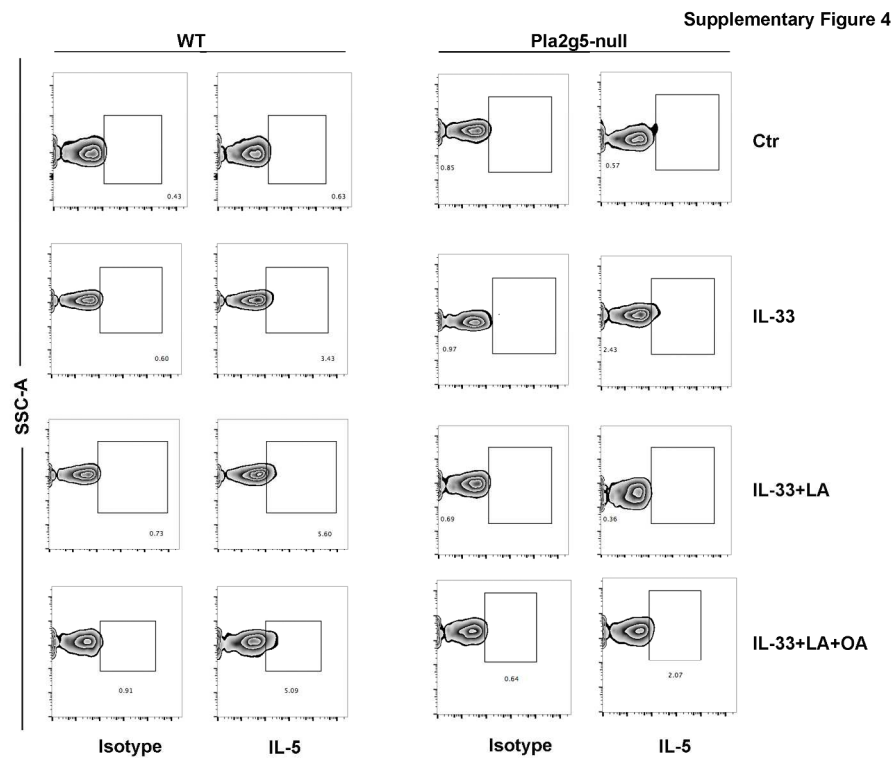


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Supplementary Figure 3



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Supplementary Figure 1. (A) Representative FACS plots showing gating strategy for ILC2s. *Alternaria*-treated Wt lung homogenates were stained for ILC2s gated as CD45⁺ Lin⁻ Thy1.2⁺ and forward and side scatter representation of the lineage positive population (depicted in blue) with low side scatter, and lineage positive population (depicted in red) with high side scatter. Percentage expression of Sca-1, ST2, ICOS, CD25 and intracellular IL-5 on Thy1.2⁺ **(B) or Thy1.2⁺ Sca-1⁺ (C)** ILC2s from homogenate lungs of *Alternaria*-treated Wt and *Pla2g5*-null mice. Images are from one representative mouse per group from three experiments with 13-19 **(A, B) or 4-10 (C)** *Alternaria*-treated mice per group.

Supplementary Figure 2. Transfer of Wt and *Pla2g5*-null BM-macrophages activated for 24h with GM-CSF/IL-4/IL-33. Wt mice received Wt or *Pla2g5*-null BM-macrophages intratracheally at day 2 after the first dose of *Alternaria*, followed by *Alternaria* at day 3, 6 and 9 or only *Alternaria*. Mice were euthanized 18 h after the last dose for flow cytometric analysis of eosinophils (CD45⁺ CD11c⁻ SiglecF⁺) and Thy1.2⁺ ILC2s expressing intracellular IL-5. Values are mean ± SEM of 3 independent experiments with 6-22 mice per group and were compared by t-test. *P < 0.05.

Supplementary Figure 3. Percentage expression of intracellular IL-5 on Thy1.2⁺ ILC2s in homogenate lungs of Wt and *Pla2g5*-null mice treated with IL-33, OA, or LA in various combinations. Analysis by flow cytometry of Thy1.2⁺ ILC2s expressing intracellular IL-5 obtained from Wt and *Pla2g5*-null homogenate lungs treated as indicated. Images are from one representative mouse per group from two-four independent experiments with 4-12 mice per group.

Supplementary Figure 4. Percentage expression of intracellular IL-5 on Thy1.2⁺ ILC2s sorted from homogenate lungs of Wt and *Pla2g5*-null mice treated with *Alternaria*. Analysis by flow cytometry of ILC2s sorted from Wt and *Pla2g5*-null homogenate lungs, rested for 40 hours prior to in-vitro stimulation with LA (200 μ M), OA (200 μ M), IL-33 (30ng/ml) or all together for 8 hours, then analyzed by flow cytometry for percentages of IL-5 positive ILC2s. Images are from one representative sample per group from three independent experiments.