

Supplementary Information

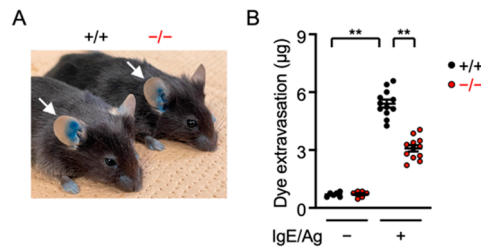


Figure S1. Additional characterization of IgE/Ag-induced PCA in *Pla2g12a*-deficient mice. (A) Representative gross image of the ears 30 min after Ag challenge in male *Pla2g12a*^{+/+} and *Pla2g12a*^{-/-} mice. Arrows indicate Evans blue extravasation. (B) Evans blue extravasation in female *Pla2g12a*^{+/+} and *Pla2g12a*^{-/-} mice with or without IgE/Ag-induced PCA. Data are presented as mean ± s.e.m. A representative image from three independent experiments is shown in (A). Data are pooled from two independent experiments. Statistical analysis was performed using Brown-Forsythe and Welch ANOVA followed by Dunnett's T3 multiple comparisons test. **, $p < 0.01$.

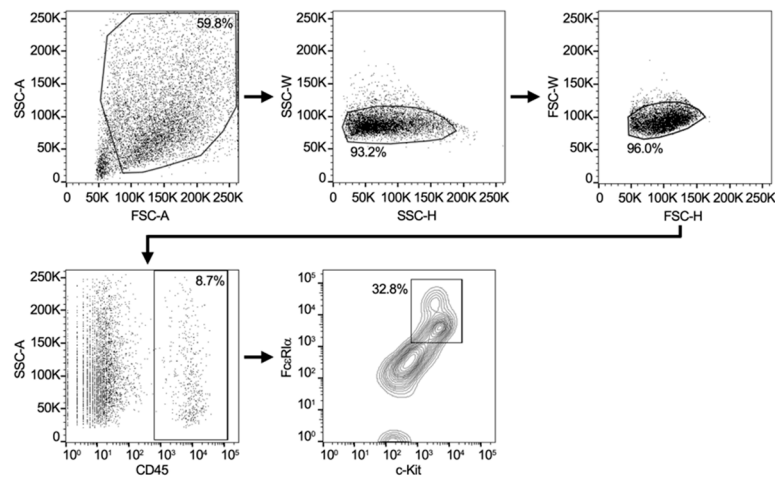


Figure S2. Flow cytometric gating strategy for identification of dermal c-Kit⁺FcεRIα⁺ mast cells from mouse ear skin. Ear skin cells were sequentially gated based on FSC/SSC characteristics, singlets, CD45 positivity, and c-Kit and FcεRIα expression. Representative flow cytometry plots from one experiment are shown.

Gene	Assay ID
<i>Fcer1a</i>	Mm00438867_m1
<i>Kit</i>	Mm00445212_m1
<i>Hdc</i>	Mm00456104_m1
<i>Mcpt4</i>	Mm00487636_g1
<i>Tpsb2</i>	Mm00487645_m1
<i>Cpa3</i>	Mm00483940_m1
<i>Ccl2</i>	Mm00441242_m1
<i>Ccl3</i>	Mm00441258_m1
<i>Il6</i>	Mm00446190_m1
<i>Tnf</i>	Mm00443258_m1
<i>Pla2g1b</i>	Mm00478249_m1
<i>Pla2g2d</i>	Mm00448160_m1
<i>Pla2g2e</i>	Mm00478870_m1
<i>Pla2g2f</i>	Mm00478872_m1
<i>Pla2g3</i>	Mm01191142_m1
<i>Pla2g5</i>	Mm00448162_m1
<i>Pla2g10</i>	Mm00449532_m1
<i>Pla2g12a</i>	Mm01316982_m1
<i>Gapdh</i>	4352339E

Table S1. TaqMan Gene Expression Assays used for RT-qPCR.