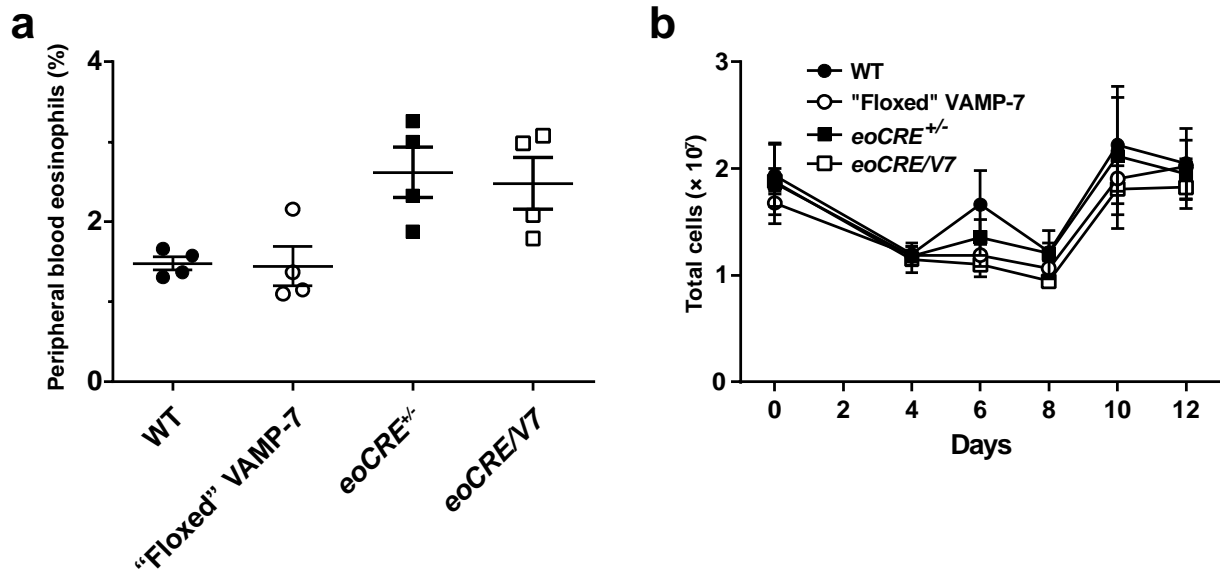
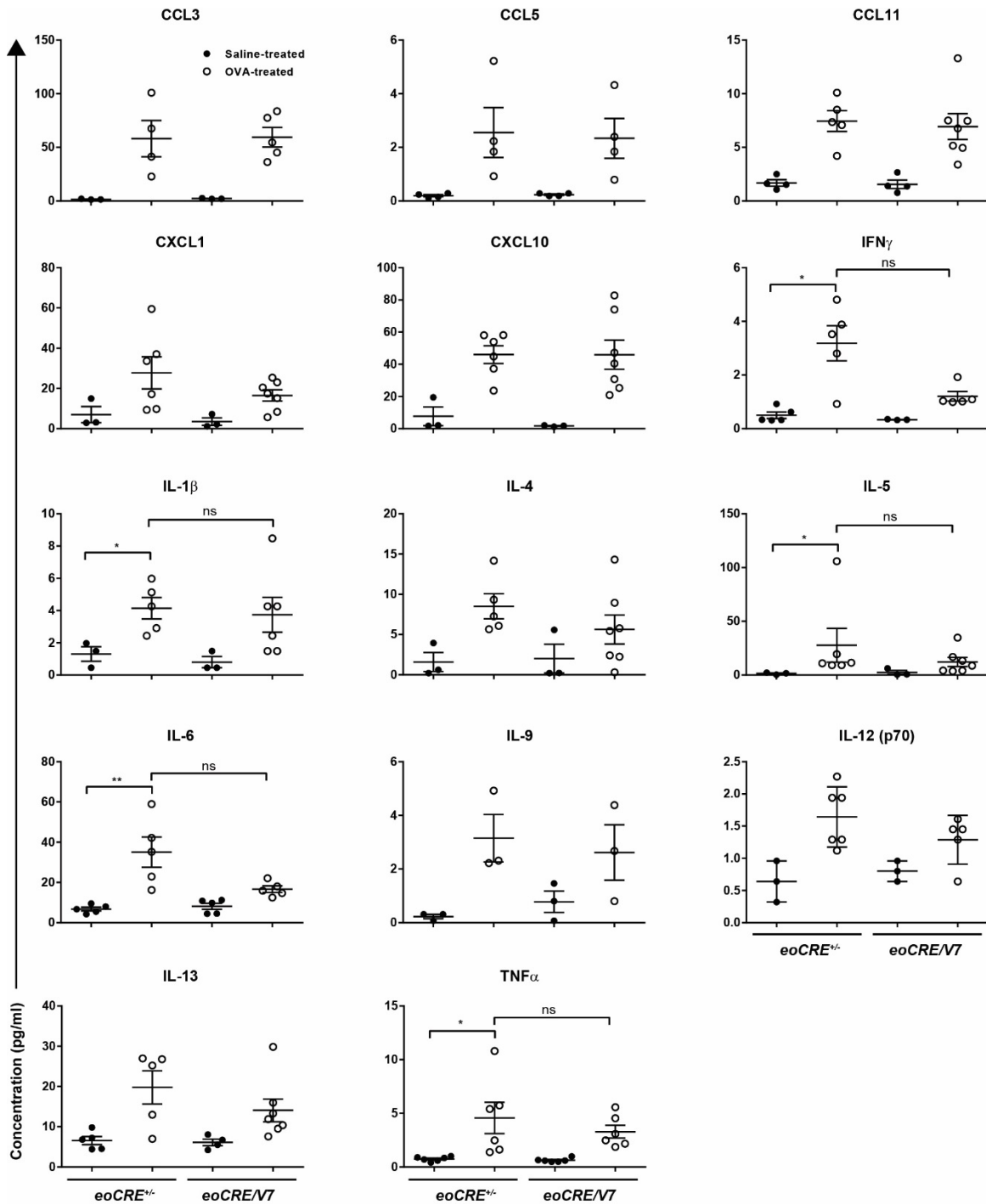


**Supplementary Figure 1. Original, non-manipulated representative Western blots and PCR gel.** (a) Western blots for Fig. 1b. Total volume loaded from each fraction = 30  $\mu$ l/lane. (b) PCR gel for Fig. 2d. (c) Western blots for Fig. 2e. Total protein loaded = 30  $\mu$ g/lane. MWM = molecular weight markers.



**Supplementary Figure 2. Comparison of circulating eosinophil levels, growth curves, and serum EPX levels between control and *eoCRE/V7* mice** (a) Peripheral blood-derived eosinophil levels presented as percentage of total WBCs in control and *eoCRE/V7* mice.  $n = 4$  individual mice/strain. (b) Growth patterns of *in vitro*-differentiated eosinophils derived from the BM of control and *eoCRE/V7* mice. Total cell counts ( $\sim 2.0 \times 10^7$  cells; day 0) for all groups decreased by half ( $\sim 1.0 \times 10^7$  cells) during the first four days of culture, due to depletion of non-granulocytic progenitors in the presence of supplementary cytokines (recombinant murine SCF and Flt-3 ligand) in BM culture media. Total cell counts for all groups then recovered ( $\sim 2.0 \times 10^7$  cells; days 4-6), likely due to removal of non-granulocytic progenitors and subsequent addition of recombinant murine IL-5, leading to proliferation and maturation of eosinophilic progenitors. Data shown indicate results from 3 independent experiments. Shown are mean  $\pm$  SEM. In all experiments,  $p > 0.05$ , using one-way ANOVA with Tukey's post-hoc test,  $n = 7$  individual mice/strain.



**Supplementary Figure 3. Cytokine levels from BAL samples obtained from *eoCRE*<sup>+/-</sup> and *eoCRE*<sup>V7</sup> mice treated with either saline or OVA** BAL samples were obtained from *eoCRE*<sup>+/-</sup> and *eoCRE*<sup>V7</sup> mice treated with saline or OVA according to the timeline in Fig. 5a and assessed for cytokine and chemokine levels using a multiplex bead-based assay. Each point represents an individual animal's cytokine level, *n* = 3-7. \* *p* < 0.05, \*\* *p* < 0.01 using Kruskal Wallis comparison with Dunn's post-hoc test. Panels without statistical comparisons or labelled 'ns' indicate no significant differences.

**Supplementary Table 1. List of PCR and qPCR primers used in this study and their sequences.**

<b>Name</b>	<b>Sequence (5' → 3')</b>
P-a	GCATTACCTGCCCCAGGCAAACCTG
P-b	GAGAGATCAGGGAATTGGTACCGGA
P-1	AACTCCTGGCTGACTCTTTGCATCT
P-2	GGACACAGAGGAAGCAGGTAACGG
P-3	GAAGCTTGCGGCGTCAGGTC
P-4	GGGTCGCCCACTGCCTGAAA