Supplementary Materials

An Autophagy Modulator Peptide Prevents Lung Function Decrease and Corrects Established Inflammation in Murine Models of Airway Allergy

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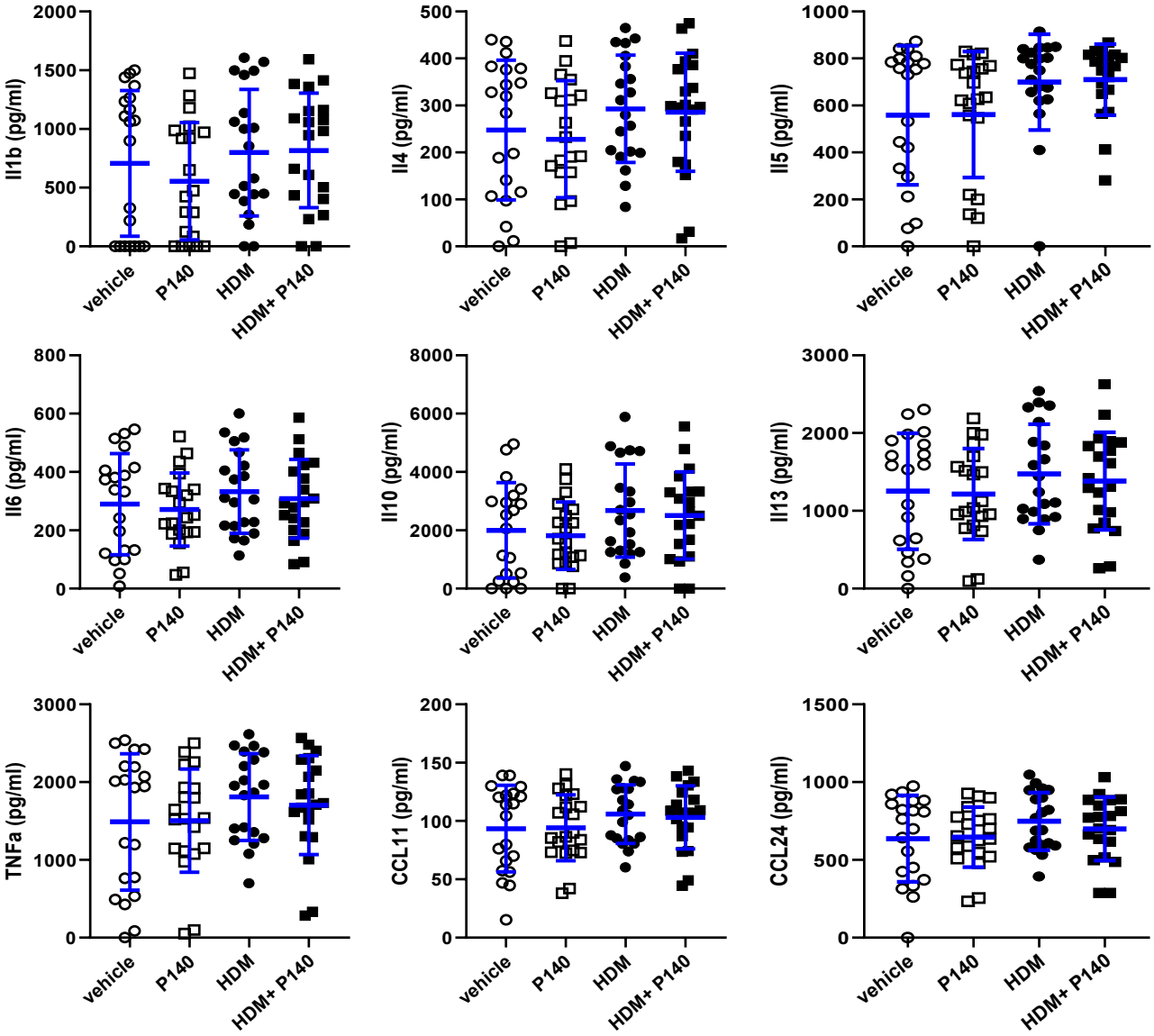
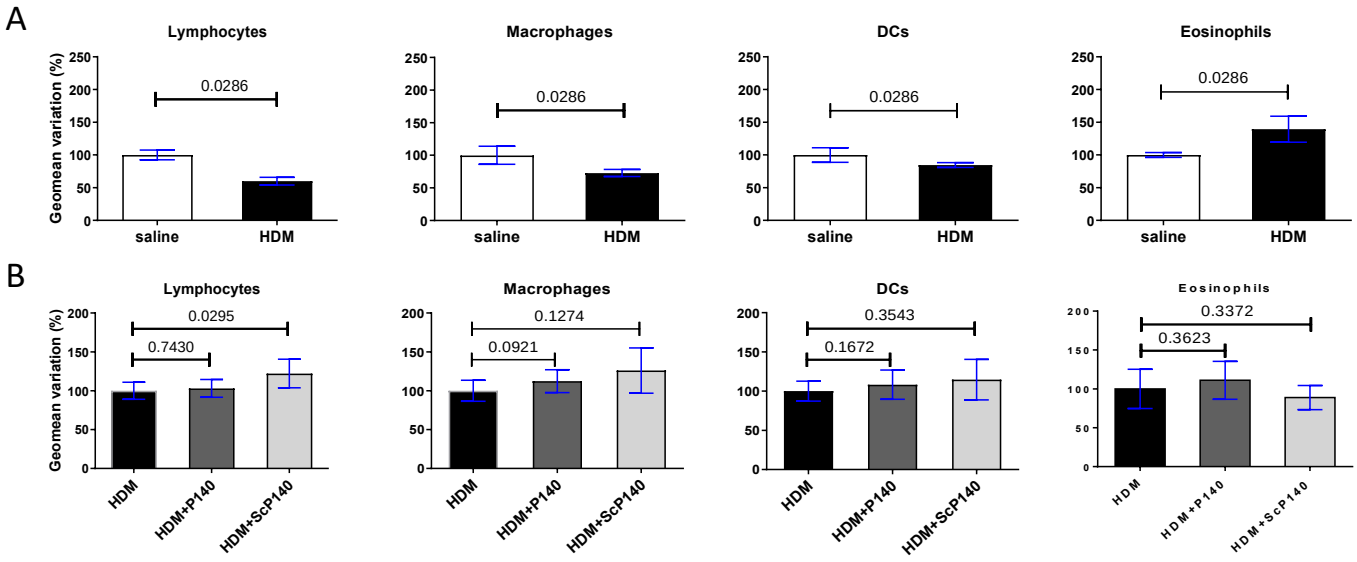
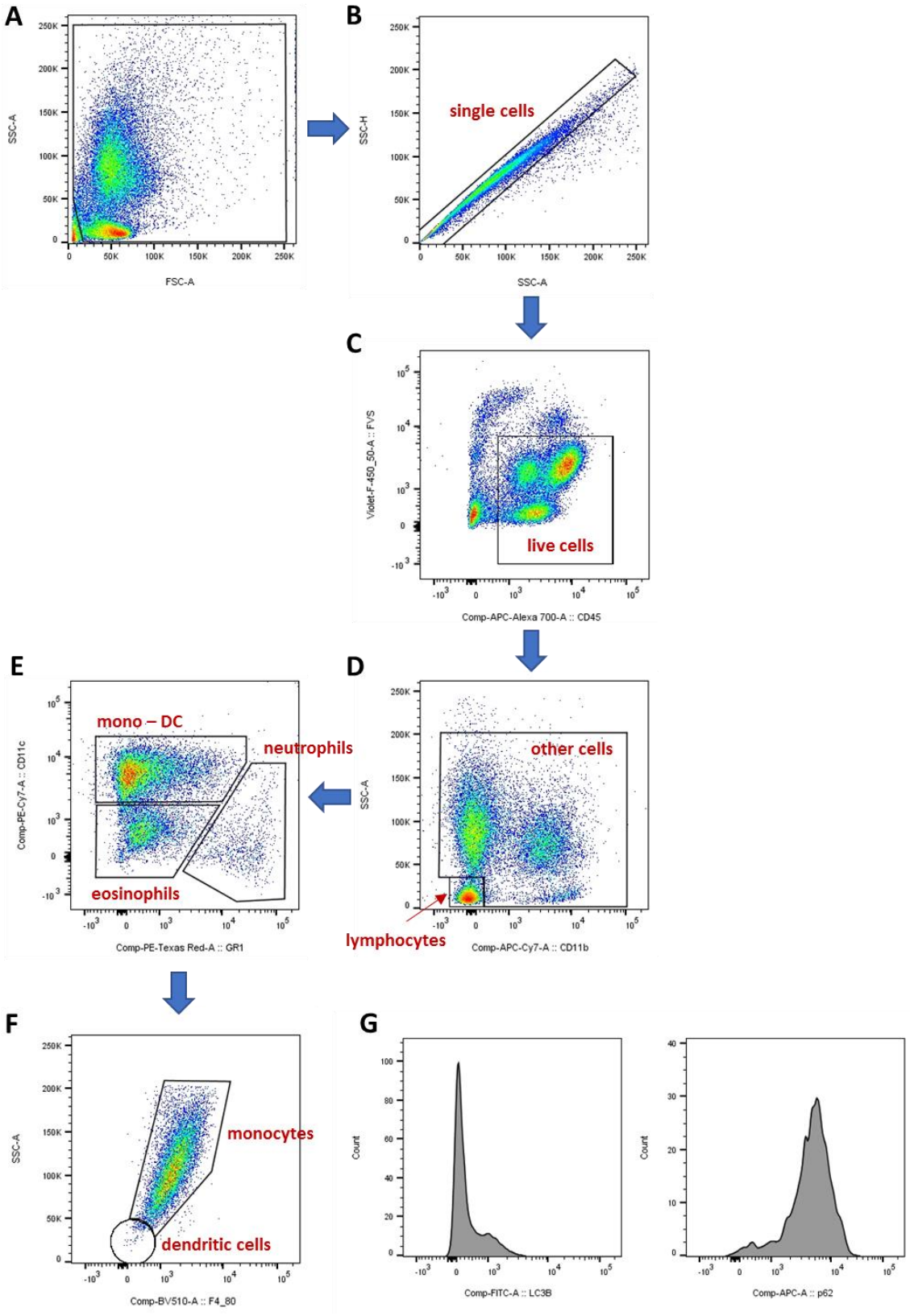


Supplementary Figure S1. ELISA measurement of cytokines/chemokines in lung extracts of mice of the four study groups (n = 20). The data are presented as means ± SEM. Differences between groups were tested for statistical significance using one-way ANOVA followed by Tukey's post-test. Data were considered significantly different when $p \leq 0.05$.



Supplementary Figure S2. Measurement of the autophagy marker SQSTM1 in the cells of BALFs collected from mice from HDM-sensitized and challenged mice. 9-week-old female BALB/c mice were sensitized and challenged intranasally with HDM as indicated in Figure 2A. They receive vehicle or P140 intravenously at day 22; BALFs were collected at day 31. SQSTM1 expression was measured by flow cytometry in different cell subsets. (**A**) Effect of HDM versus saline. (**B**) Effect of P140 (and ScP140 control peptide) versus vehicle in HDM-induced mice. The data are represented as the mean variation ± SEM of the geomean (in%). HDM, n = 8 ; HDM + P140, n = 9 ; HDM + ScP140, n = 5 (pooled data from 2 independent experiments).



Supplementary Figure S3. Gating strategy for immune cell subsets in BALF and spleen. Cells were gated in SSC-A and FSC-A dot blot to eliminate debris (**A**). Then cells were gated in a SSC-H and SSC-A dot blot to eliminate doublets (**B**). CD45+ cells were chosen to analyze live leucocytes (**C**). CD11b+ cells were chosen to analyze mononuclear cells (**D**). Gr-1 and CD11c+ cells were chosen to analyze monocytes and dendritic cells, eosinophils and neutrophils (**E**). F4/80 signal was used to distinguish dendritic cells from monocytes in BAL cell population (**F**). LC3B-II and SQSTM1/p62 expression was studied in these cell subsets (**G**). Abbreviations: FSC: Forward scatter; FSC-H: Forward scatter height; FSC-A: Forward scatter area; SSC: Side scatter.