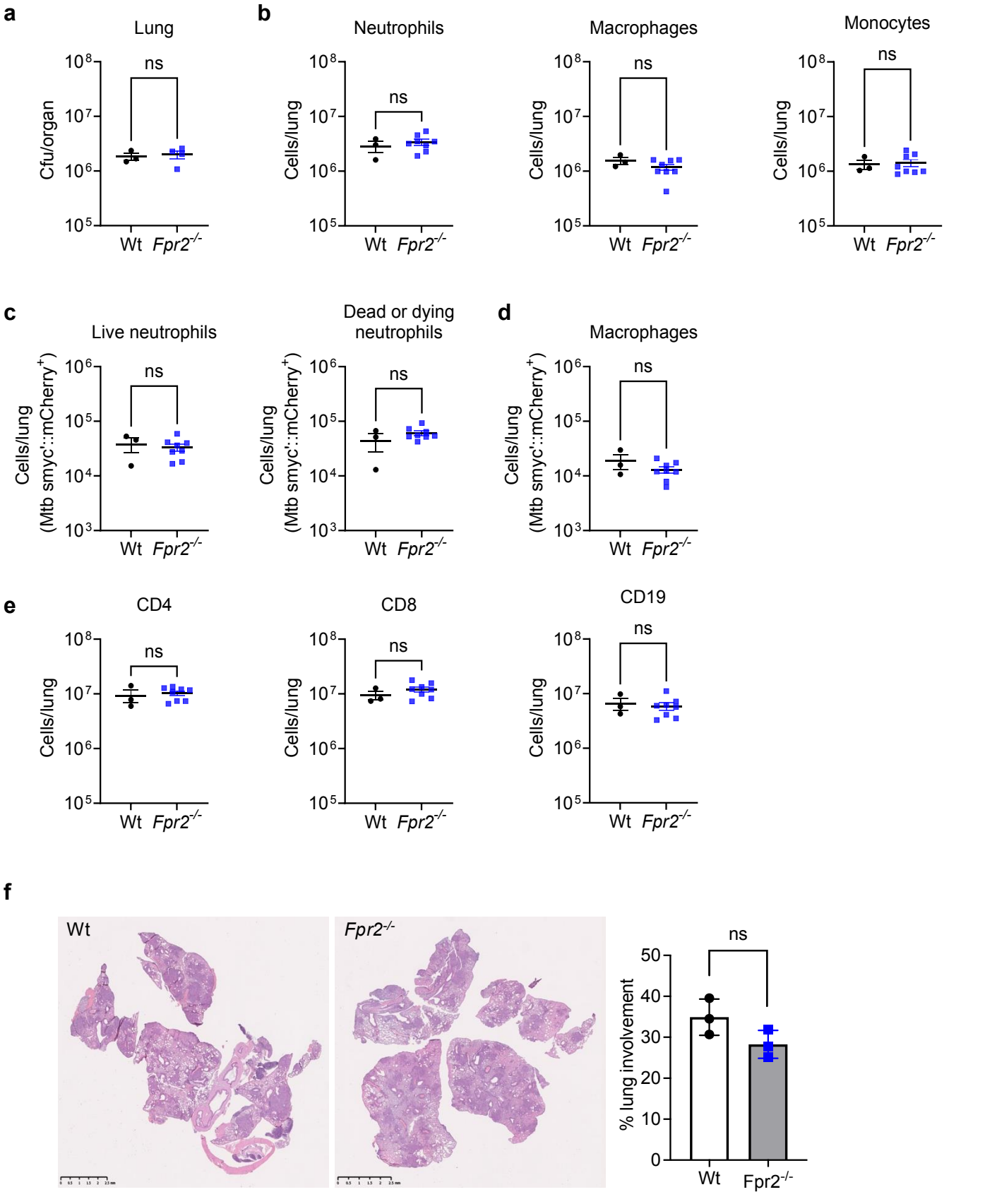
Supplementary figure 1



Supplementary figure 1. Fpr2 deletion did not impact host resistance to Mtb infection. Wt and *Fpr2*$^{-/-}$ mice were aerosol-infected with approximately 100 CFU of Mtb HN878 reporter bacteria. Lung bacterial burden, cellular infiltration and histopathology were conducted on day 45 post-infection (pi).

(**a**) Bacterial load was measured as CFU per ml in the lungs of Wt and *Fpr2*$^{-/-}$ mice at day 45 pi.

(**b**) Flow cytometry assessment of myeloid cells including neutrophils, macrophages, and monocytes.

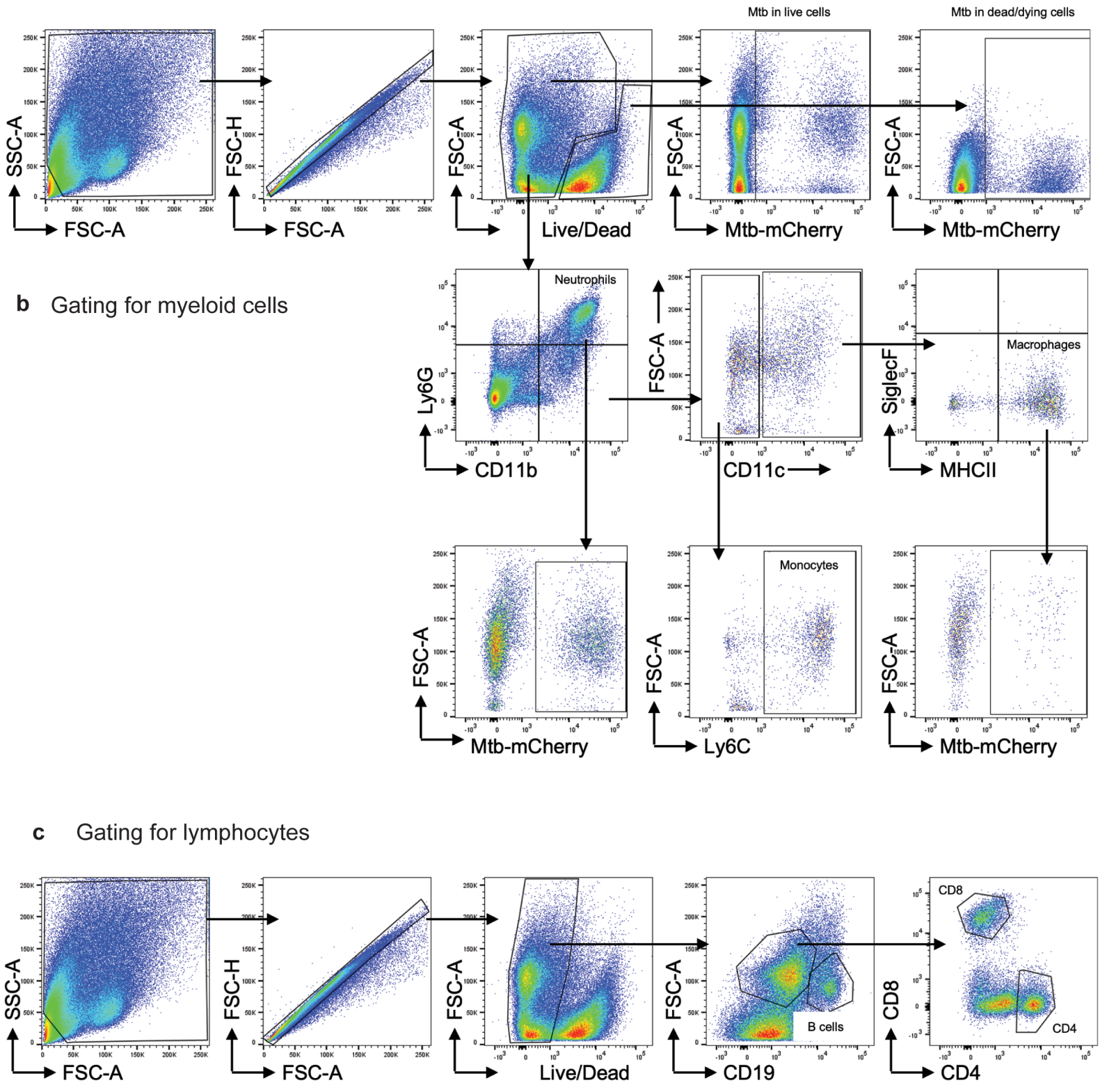
(**c-d**) Flow cytometry assessment of infected neutrophils and macrophages: Live infected neutrophils were identified using viability dye^{-ve}CD11b+Ly6G+smyc'::mCherry+, dead or dying infected neutrophils with viability dye^{+ve}CD11b+Ly6G+smyc'::mCherry +, and live infected macrophages with viability dye^{-ve}CD11b+Ly6G-CD11c+MHCII+SiglecF-smyc'::mCherry+.

(**e**) Flow cytometry assessment of lymphoid cells: CD4, CD8-T-cells, and CD19 B cells.

n=3 for Wt and n=8 for *Fpr2*$^{-/-}$ mice. Error bars represent Mean ± SEM. Statistical analysis was conducted using an unpaired t-test. 'ns' denotes a non-significant result.

(**f**) Lung Histopathology: Representative H&E-stained lungs showing histopathology and quantification of necrotic lesion areas within the lungs of Wt and *Fpr2*$^{-/-}$ mice. n=3 for Wt and *Fpr2*$^{-/-}$ mice. Error bars represent Mean ± SD. Statistical analysis was conducted using an unpaired t-test. 'ns' denotes a non-significant result.

Supplementary figure 2



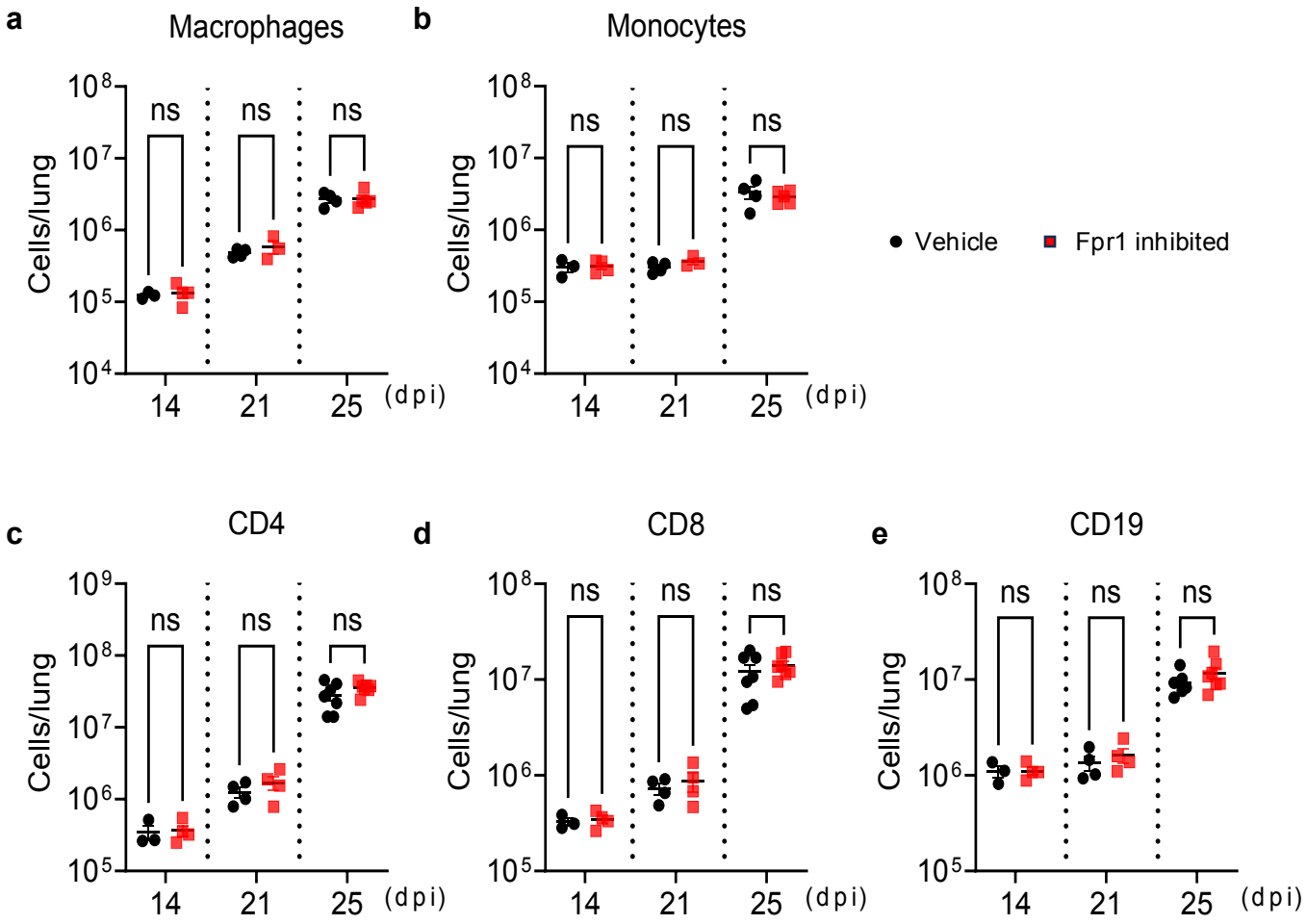
Supplementary figure 2. Gating Strategy for identifying cell populations in lung single cell suspensions.

(**a**) Identification of Mtb infected live and dead/dying cells.

(**b**) Detection of myeloid cells: Neutrophils, macrophages, and monocytes

(**c**) Analysis of lymphocytes: Populations of CD19+ (B cells), CD4+ T cells, and CD8+ T cells are distinctly gated and evaluated.

Supplementary figure 3



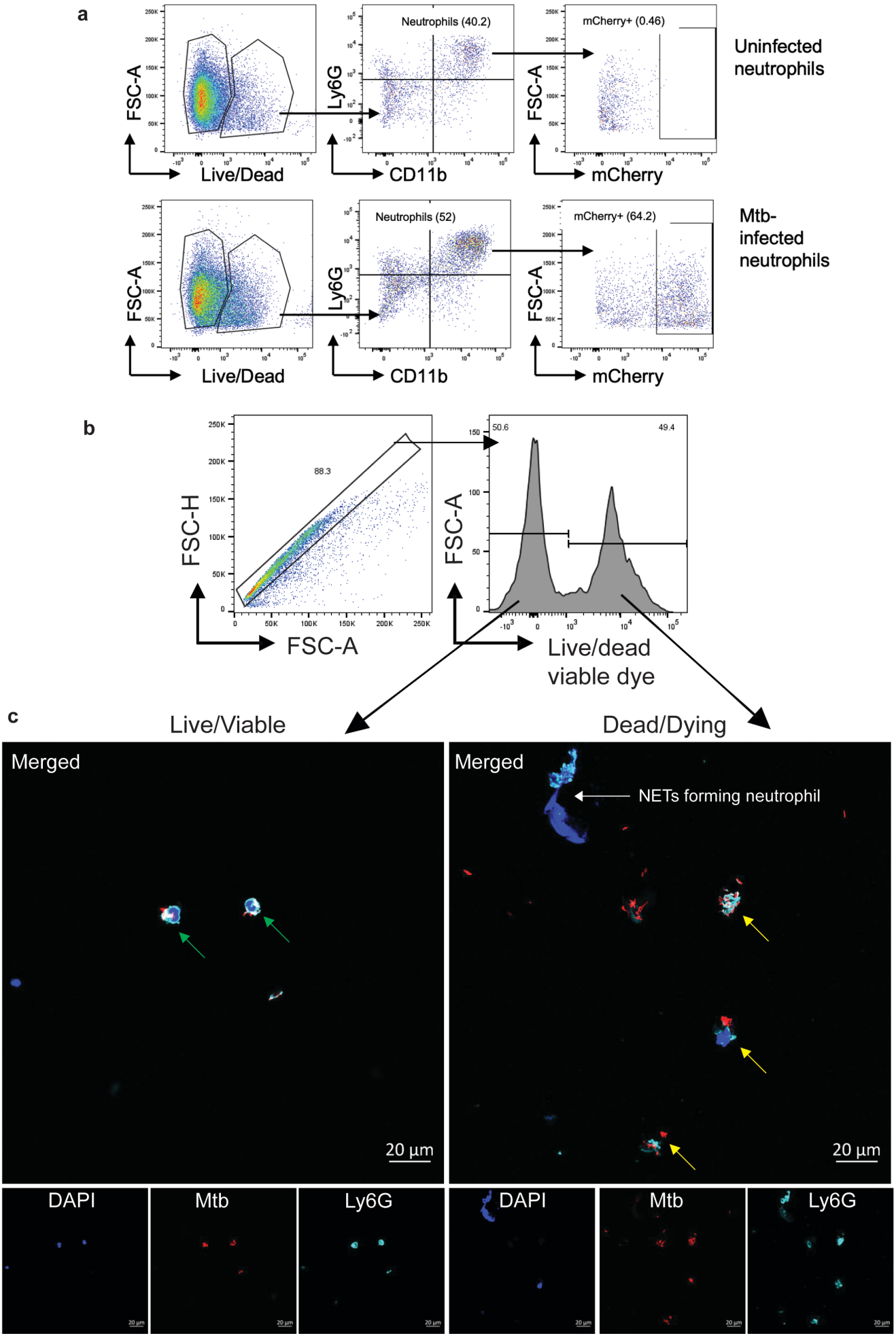
Supplementary figure 3. Cellular dynamics in Fpr1 inhibited *Il1r1*$^{-/-}$ mice lungs (Related to Figure 3).

(**a-b**) Flow cytometry assessment of myeloid cells, including macrophages, and monocytes.

(**c-e**) Flow cytometry assessment of lymphocytes: T-lymphocytes (CD4+, CD8+) and B lymphocytes (CD19+).

Sample sizes ranged from 3 to 7 mice per group. Error bars represent Mean ± SEM. Statistical analyses were performed using an unpaired t-test. “ns” denotes a non-significant result.

Supplementary Figure 4



Supplementary figure 4. Gating for live/dead neutrophils. Bone marrow-derived neutrophils were isolated from Wt mice using MACS (see Methods) and left infected or infected with Mtb HN878 (smyc'::mCherry). After twenty hours of post-infection, both infected and uninfected cells were stained with neutrophils markers.

(**a**) Flow cytometry analysis of infected and uninfected cells to gate mCherry^{+ve} bacteria in neutrophils.

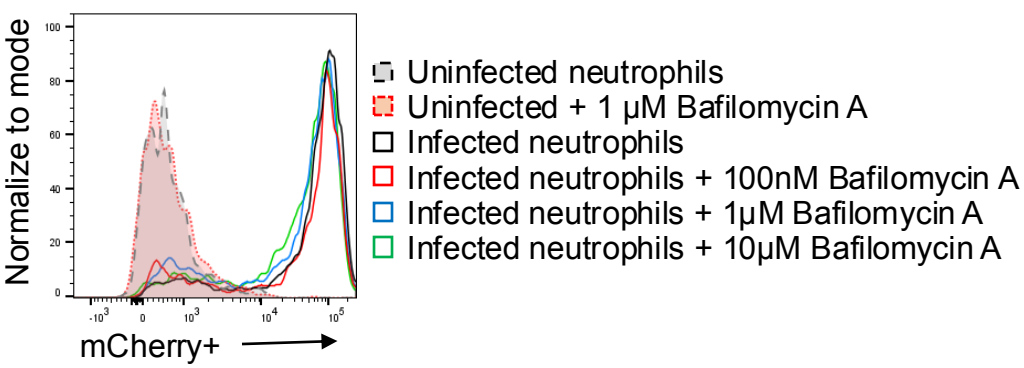
Bone marrow-derived neutrophils were isolated from Wt mice using MACS and infected with Mtb HN878 (smyc'::mCherry). Twenty hours post-infection, the cells were stained with a live-dead viability dye and then fixed with 4% paraformaldehyde. The cells were sorted using a FACS ARIA sorter, gating for populations that were either viability dye-negative or -positive.

(b) Sorting Mtb infected live and dead/dying neutrophils.

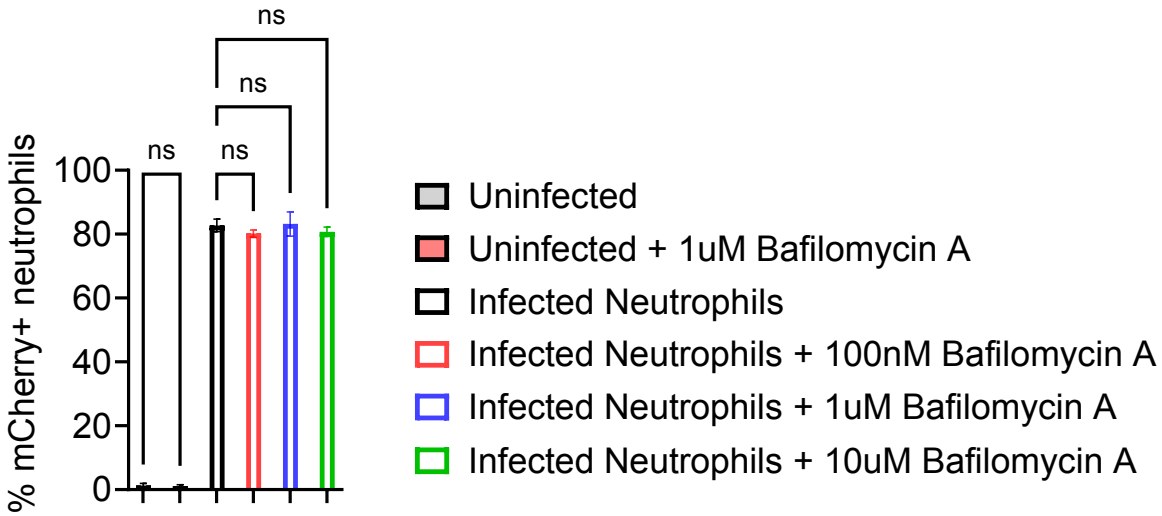
(**c**) Representative immunofluorescence images of live and dead/dying Mtb-infected neutrophils. DAPI (blue) stains nuclei, Ly6G (cyan) and Mtb smyc':: mCherry (red). Scale bar=20um.

Supplementary figure 5

a



b



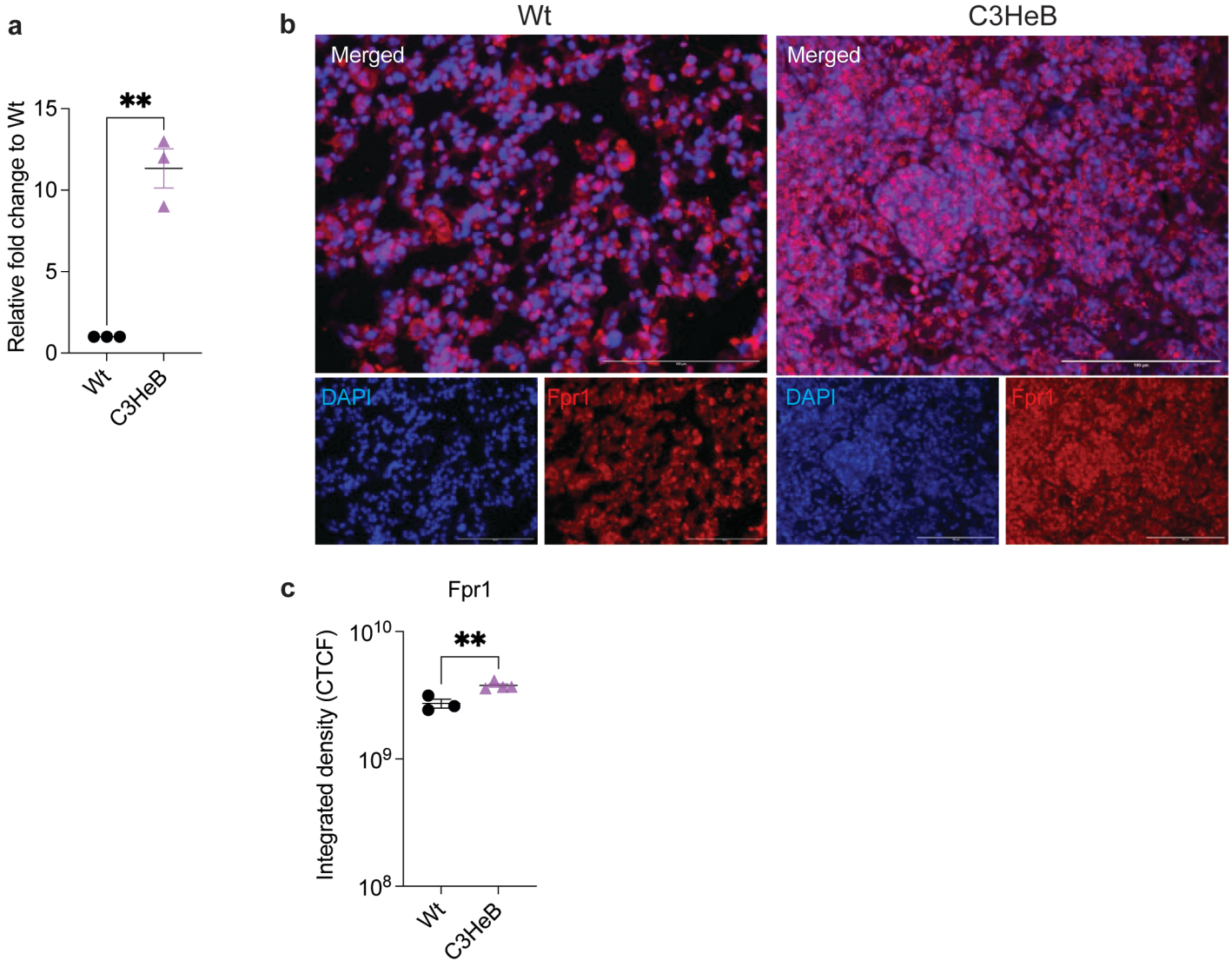
Supplementary figure 5: Altering phagosomal pH does not affect Mtb smyc'::mCherry fluorescence.

(**a**) Mean fluorescence intensity (MFI) of uninfected cells (with and without 1 µM bafilomycin) and Mtb-infected cells (untreated or treated with different concentrations of bafilomycin).

(**b**) Impact of bafilomycin on intracellular Mtb in neutrophils: Percentage of Mtb-infected neutrophils (smyc'::mCherry+) following bafilomycin treatment.

Error bars represent Mean ± SD. Statistical analysis was conducted using an ordinary one-way ANOVA. 'ns' denotes a non-significant result.

Supplementary figure 6



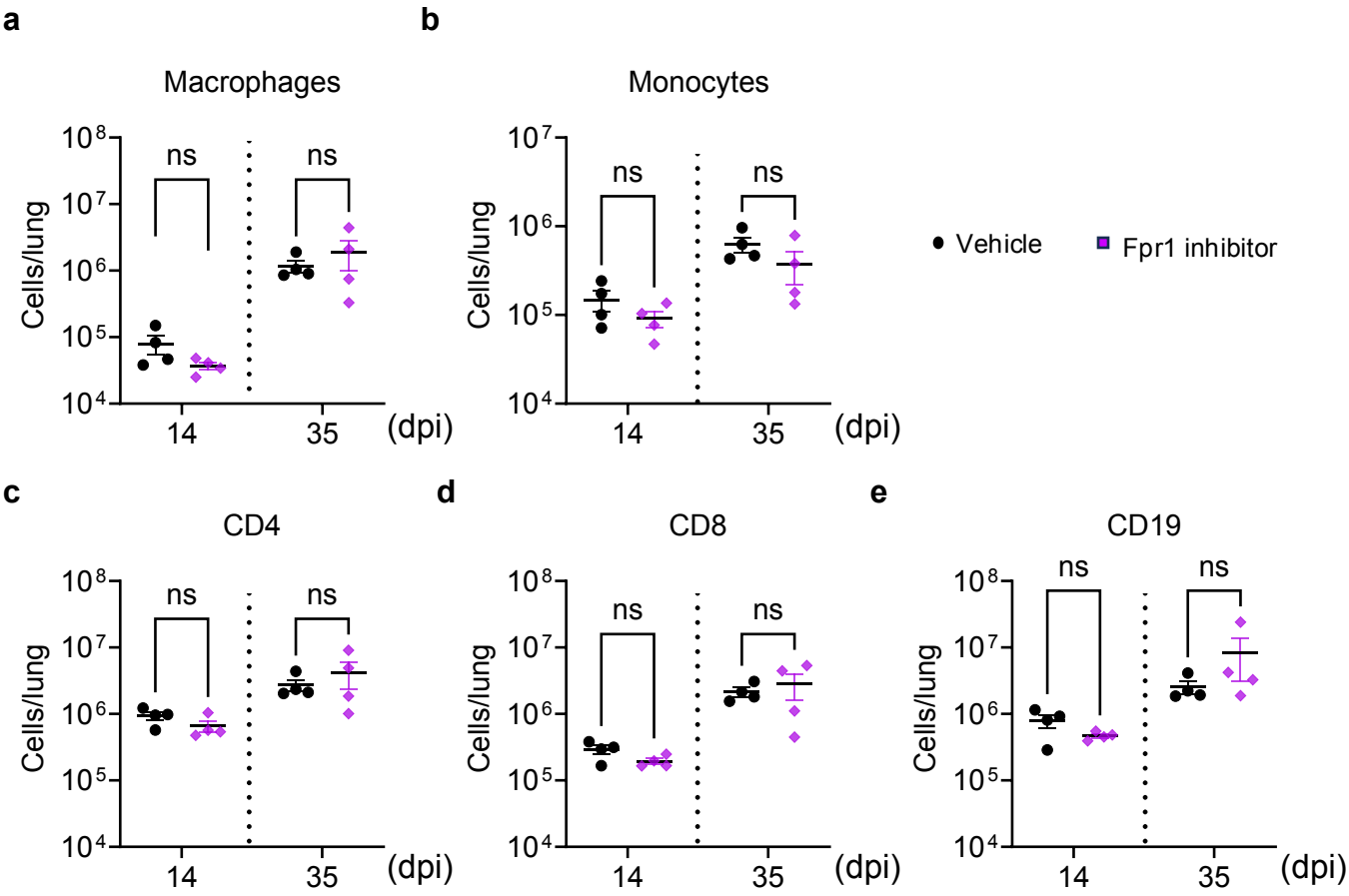
Supplementary figure 6. Fpr1 expression in C3HeB mouse lungs.

(**a**) Wild type C57BL/6 (Wt) and C3HeB mice were infected via aerosol with Mtb HN878 smyc'':: mCherry (Mtb), delivering approximately 100 CFU to the lungs. At 35 dpi, Fpr1 expression was quantified in the lungs using qPCR. Expression levels in C3HeB mice were calculated relative to those in Wt mice.

(**b**) Immunofluorescence staining of formalin-fixed paraffin-embedded (FFPE) lung sections from Mtb-infected Wt and C3HeB mice at 35 dpi. Stains used: DAPI (blue) to highlight nuclei, Fpr1 (red) to detect Fpr1 expression.

(**c**) Quantification of fluorescence intensity comparing Mtb-infected Wt and C3HeB lungs. Error bars represent Mean ± SEM. Statistical analysis was conducted using an unpaired t-test. **$p<0.01$.

Supplementary figure 7



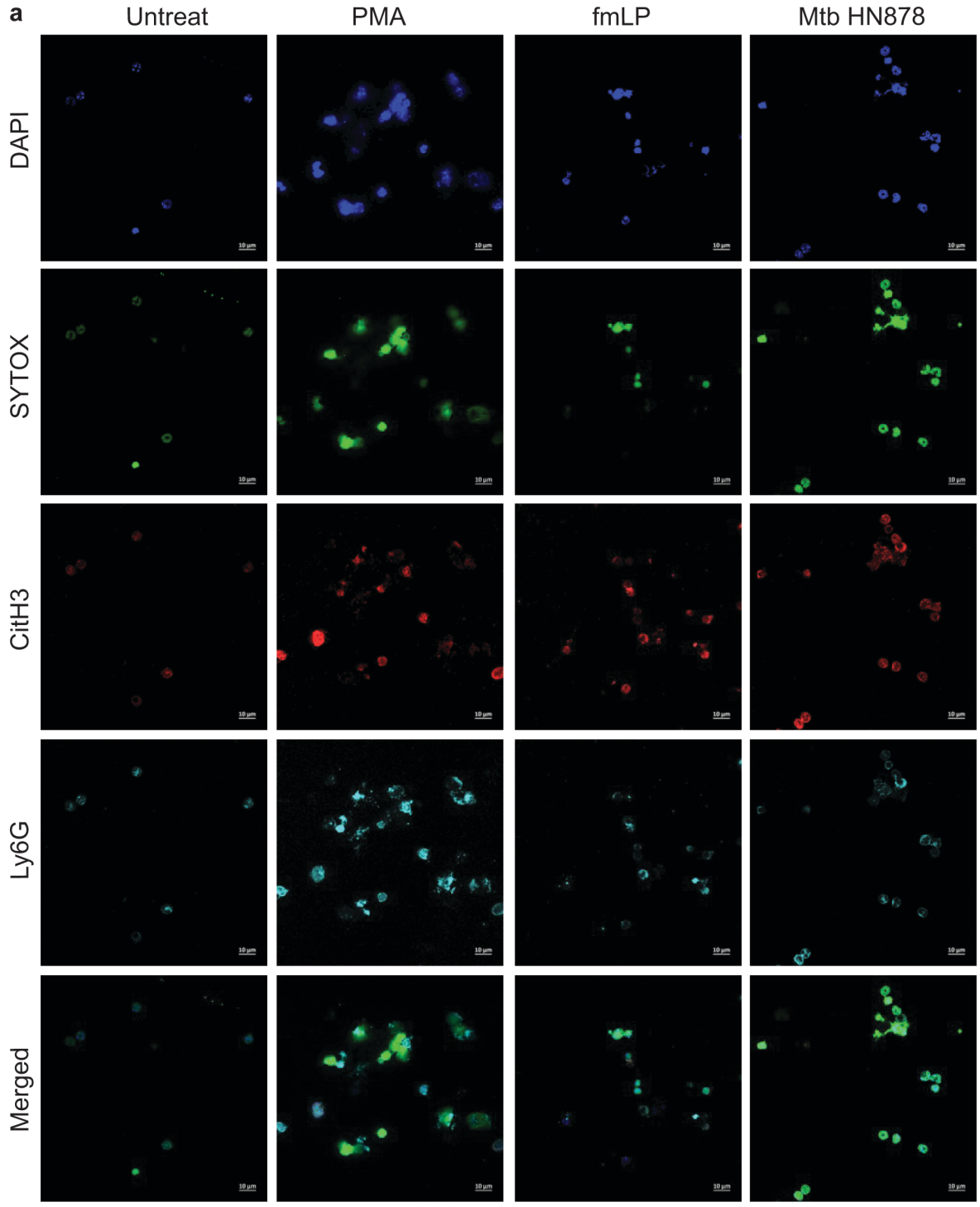
Supplementary figure 7. Cellular dynamics in Fpr1 Inhibited-C3HeB mouse lungs (Related to Figure 4).

(**a-b**) Flow cytometry assessment of myeloid cells, including macrophages, and monocytes.

(**c-e**) Flow cytometry assessment of lymphocytes: T-lymphocytes (CD4+, CD8+) and B lymphocytes (CD19+). n=4 mice per group.

Error bars represent Mean ± SEM. Statistical analyses were performed using an unpaired t-test. “ns” denotes a non-significant result.

Supplementary Figure 8



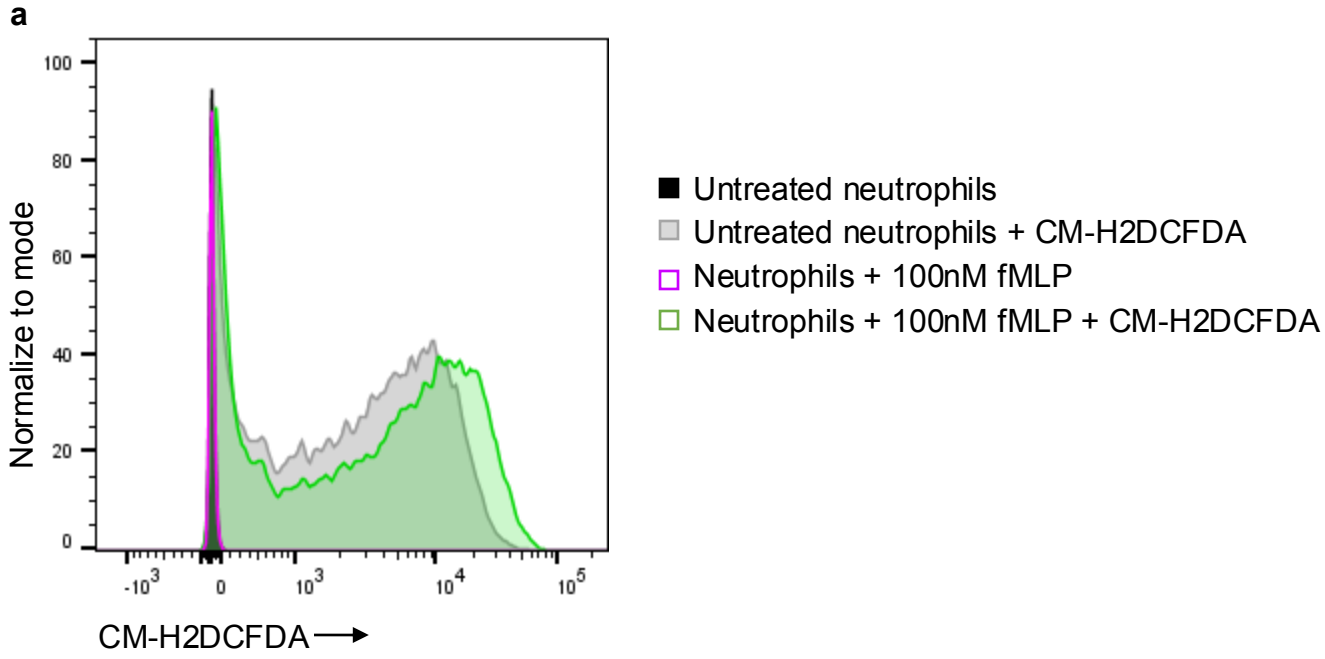
Supplementary figure 8: Fpr1 stimulation and Mtb Infection induce Neutrophil Extracellular Trap (NET) formation.

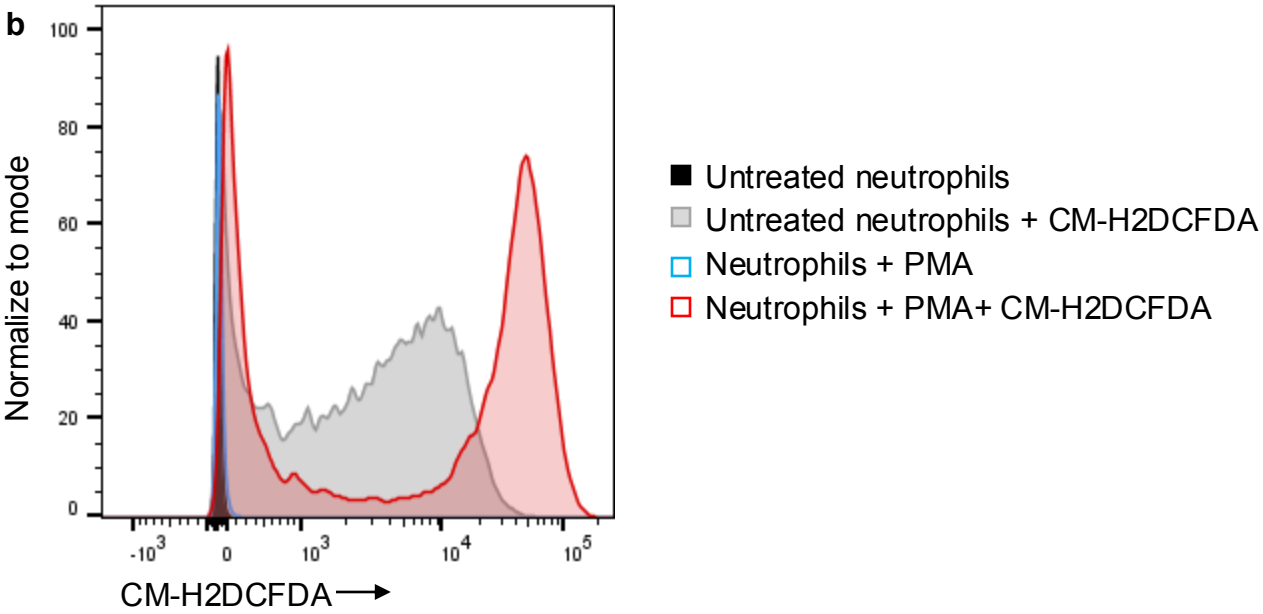
(**a**) Representative immunofluorescence images of NET-forming neutrophils following stimulation with PMA, fmLP, and Mtb infection. The stains used include Sytox Green (green), Ly6G (cyan), CitH3 (red), and DAPI (blue) for nuclei.

(**b**) Percentage of NET-forming neutrophils following PMA, fmLP, and Mtb infection.

Error bars represent Mean ± SD. Statistical analyses were performed using ordinary one-way ANOVA. *p<0.05, **p<0.01, ***p<0.001.

Supplementary figure 9





Supplementary figure 9: ROS Production from neutrophils following Fpr1 stimulation.

(**a**) Representative histograms of untreated, CM-H2DCFDA-pulsed untreated neutrophils, fMLP-primed neutrophils, and CM-H2DCFDA-pulsed fMLP-primed neutrophils.

(**b**) Representative histograms of untreated, CM-H2DCFDA-pulsed untreated neutrophils, PMA-stimulated neutrophils, and CM-H2DCFDA-pulsed PMA-stimulated neutrophils.