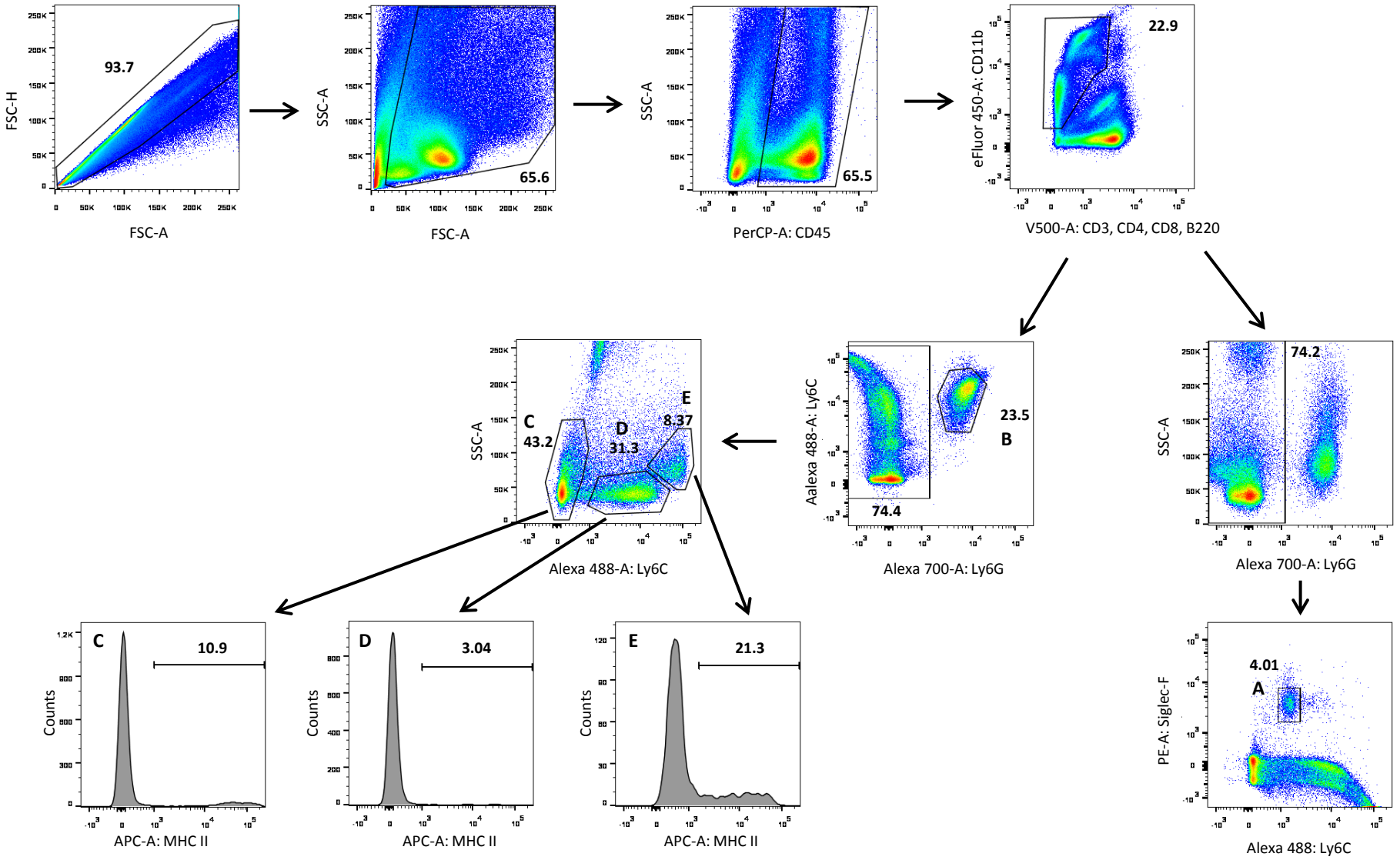


FIG S1 Immunophenotyping of myeloid cell subsets in BALB/c mouse lungs. Doublets (FSC-H vs. FSC-A), debris (SSC-A vs. FSC-A) and non-leukocyte cells (SSC-A vs. CD45) were excluded. CD11b^{+} Lineage^{-} cells (gated out using a dump channel: CD3, CD4, CD8, B220) were then divided on eosinophil population (A; Ly6G^{-}Ly6C^{int}SiglecF^{+}), neutrophil population (B; Ly6G^{+}Ly6C^{+}), macrophage population (C; Ly6C^{-}), Ly6C^{int} and Ly6C^{high} monocyte populations (D and E, respectively). Populations C, D, E were then further examined for their surface expression of MHC II molecule. Frequencies of cells in each gate are expressed as a percentage of cells.

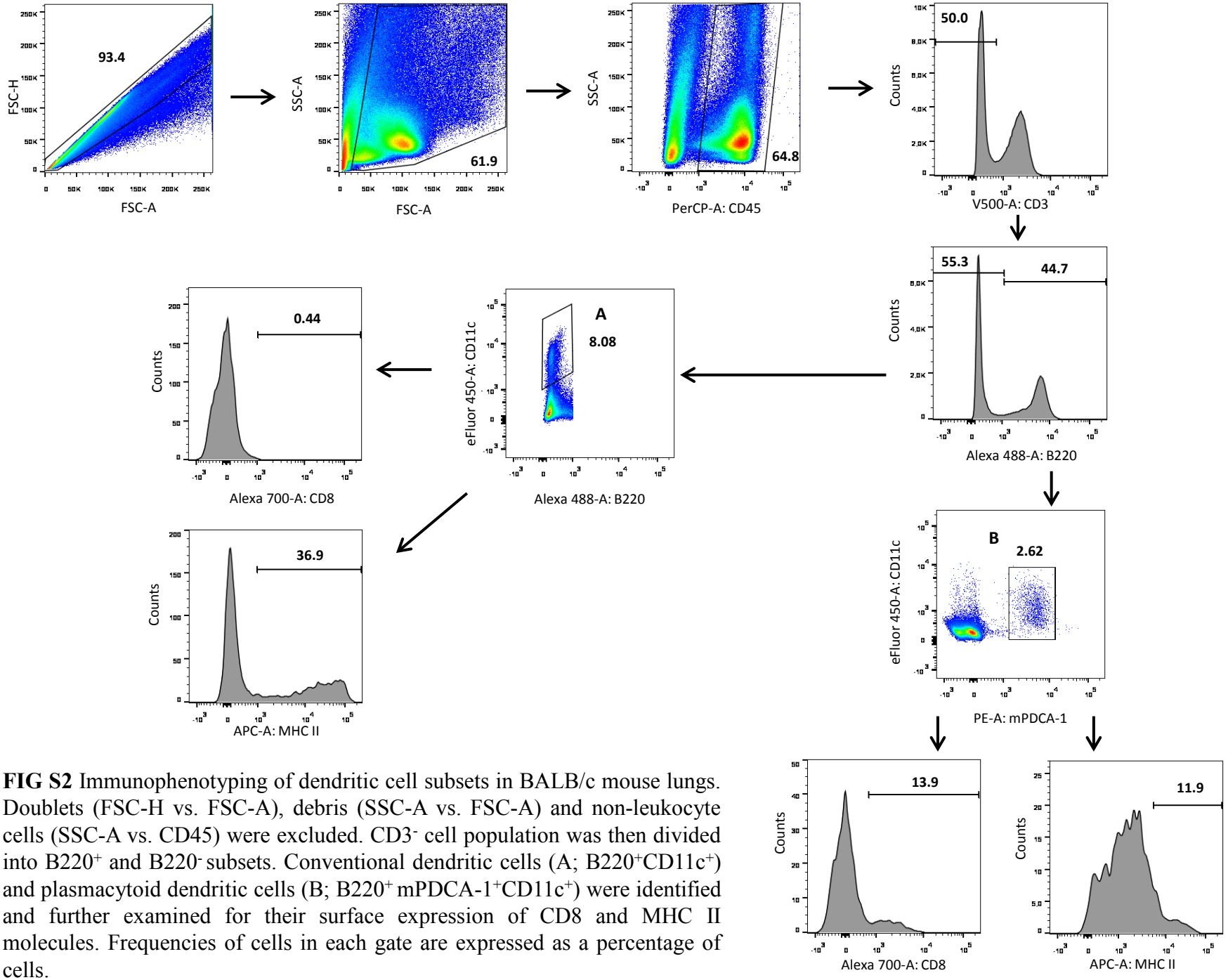


FIG S2 Immunophenotyping of dendritic cell subsets in BALB/c mouse lungs. Doublets (FSC-H vs. FSC-A), debris (SSC-A vs. FSC-A) and non-leukocyte cells (SSC-A vs. CD45) were excluded. $CD3^-$ cell population was then divided into $B220^+$ and $B220^-$ subsets. Conventional dendritic cells (A; $B220^+CD11c^+$) and plasmacytoid dendritic cells (B; $B220^+$ $mPDCA\text{-}1^+CD11c^+$) were identified and further examined for their surface expression of CD8 and MHC II molecules. Frequencies of cells in each gate are expressed as a percentage of cells.

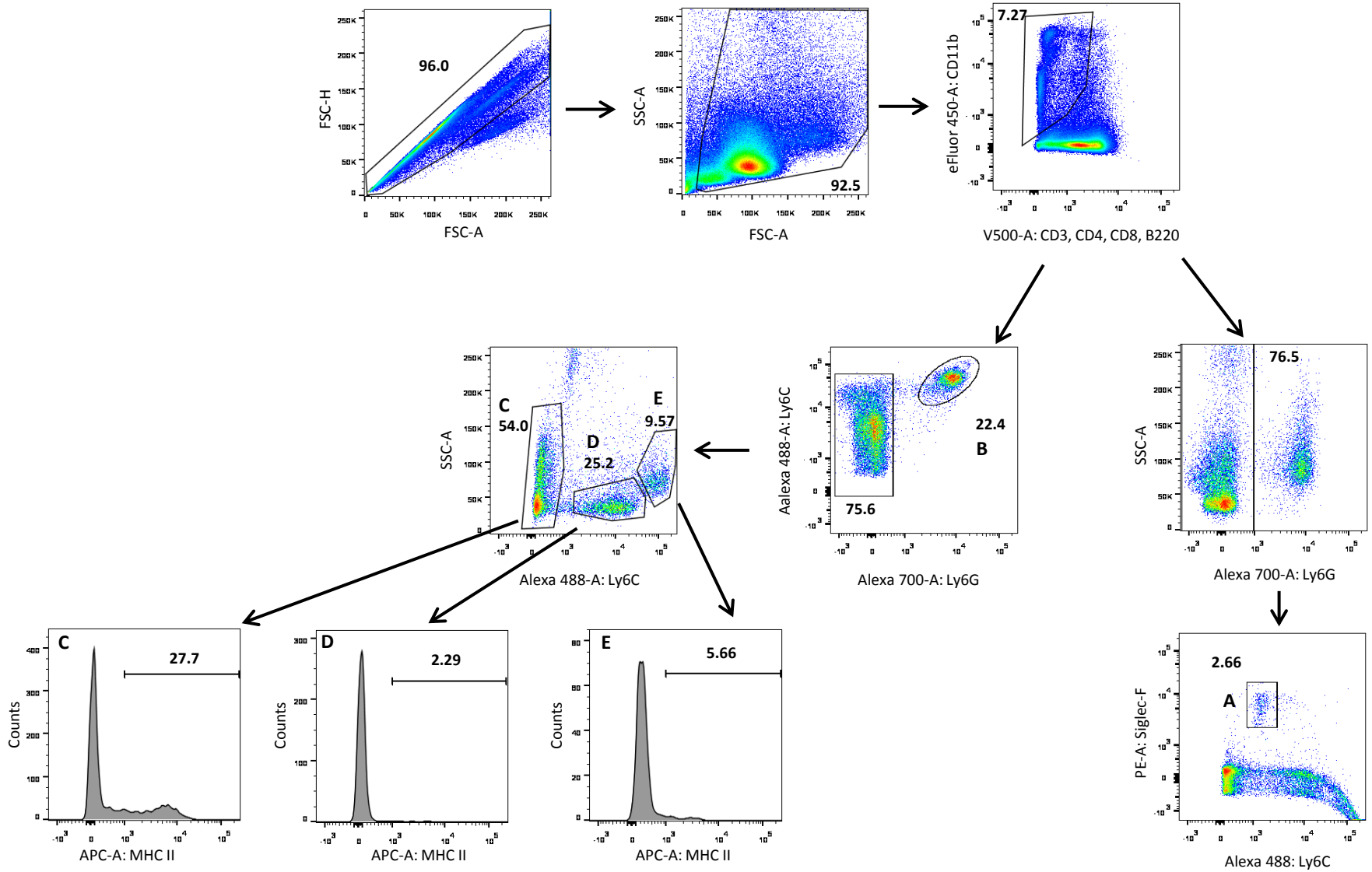


FIG S3 Immunophenotyping of myeloid cell subsets in BALB/c mouse spleens. Doublets (FSC-H vs. FSC-A) and debris (SSC-A vs. FSC-A) were excluded. CD11b^{+} Lineage^{-} cells (gated out using a dump channel: CD3, CD4, CD8, B220) were then divided on eosinophil population (A; Ly6G^{-}Ly6C^{int}SiglecF^{+}), neutrophil population (B; Ly6G^{+}Ly6C^{+}), macrophage population (C; Ly6C^{-}), Ly6C^{int} and Ly6C^{high} monocyte populations (D and E, respectively). Populations C, D, E were then further examined for their surface expression of MHC II molecule. Frequencies of cells in each gate are expressed as a percentage of cells.

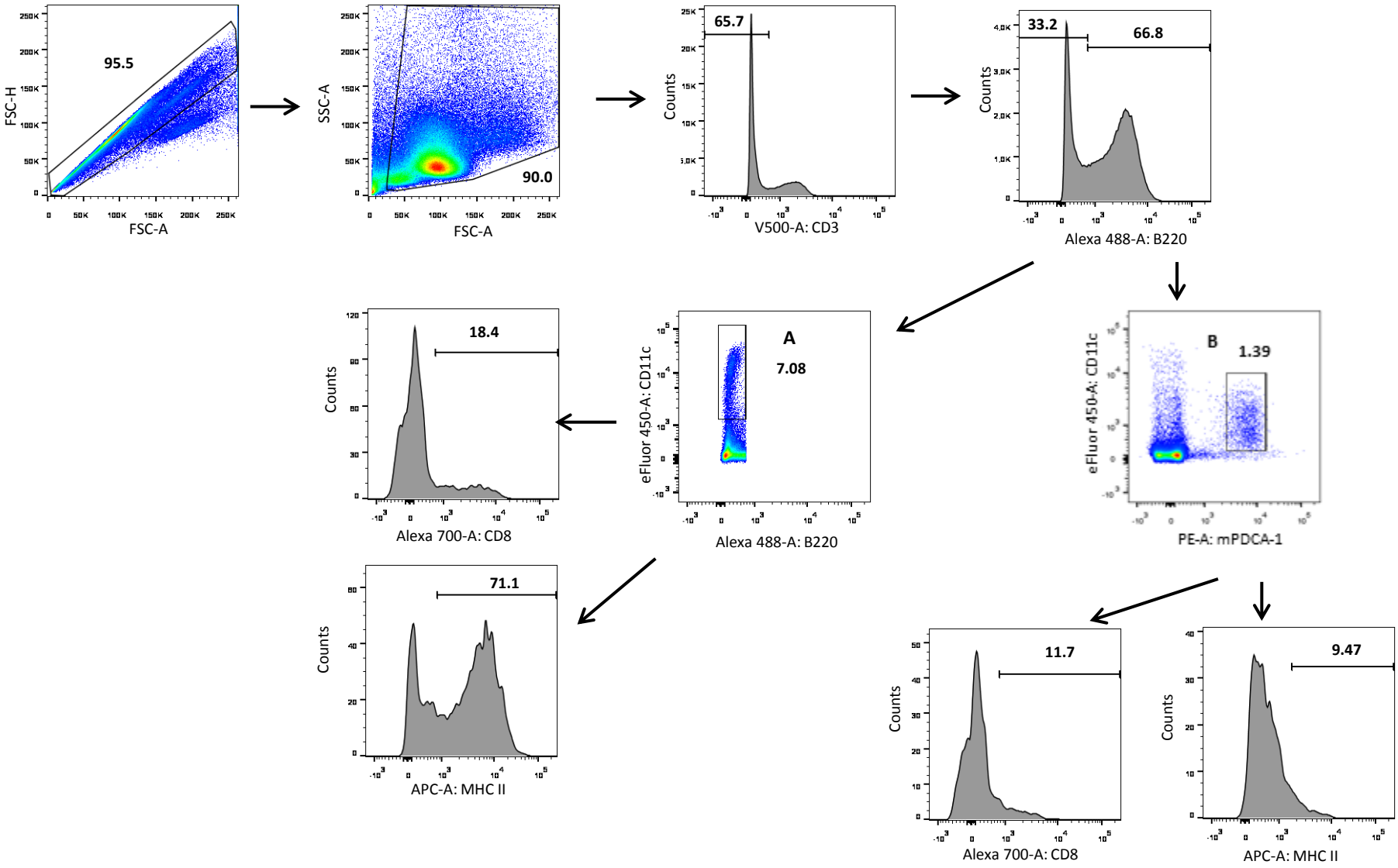
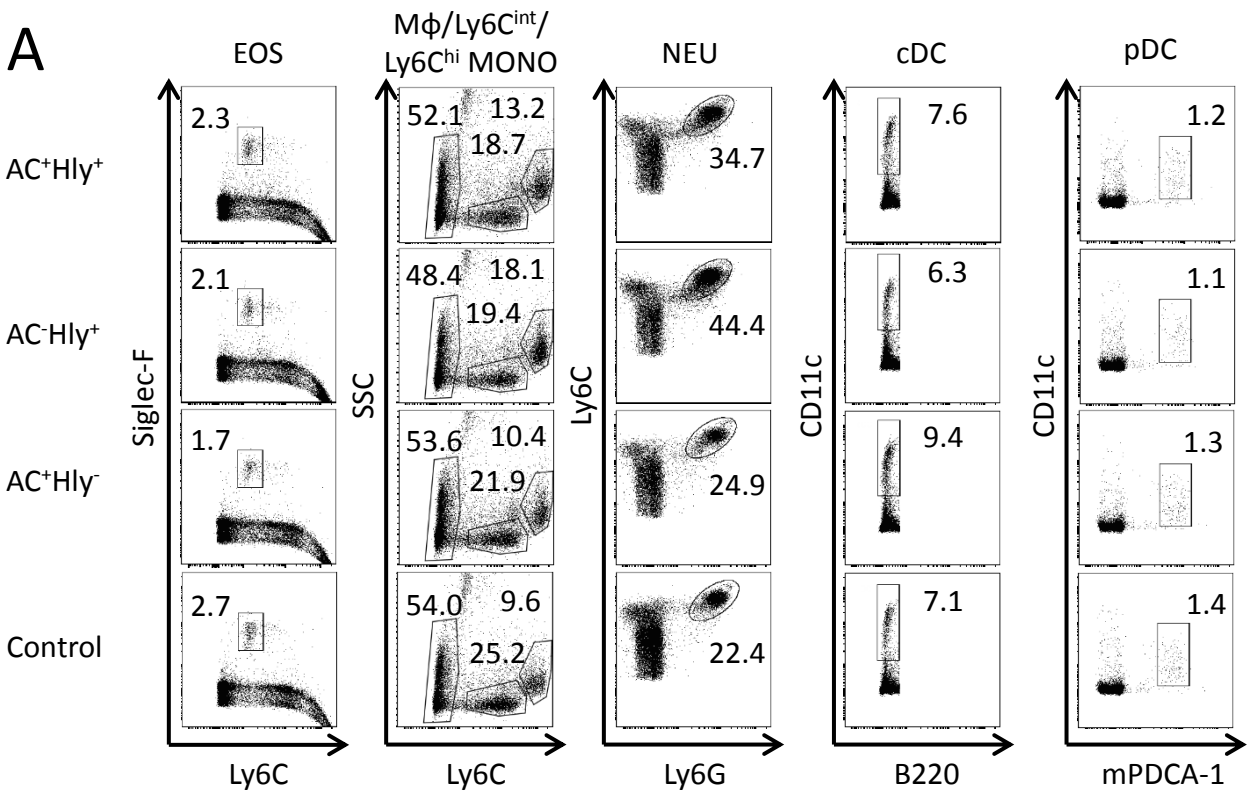


FIG S4 Immunophenotyping of dendritic cell subsets in BALB/c mouse spleens. Doublets (FSC-H vs. FSC-A) and debris (SSC-A vs. FSC-A) were excluded. $CD3^-$ cell population was then divided into $B220^+$ and $B220^-$ subsets. Conventional dendritic cells (A; $B220^+CD11c^+$) and plasmacytoid dendritic cells (B; $B220^+$ mPDCA-1^+CD11c^+) were identified and further examined for their surface expression of CD8 and MHC II molecules. Frequencies of cells in each gate are expressed as a percentage of cells.



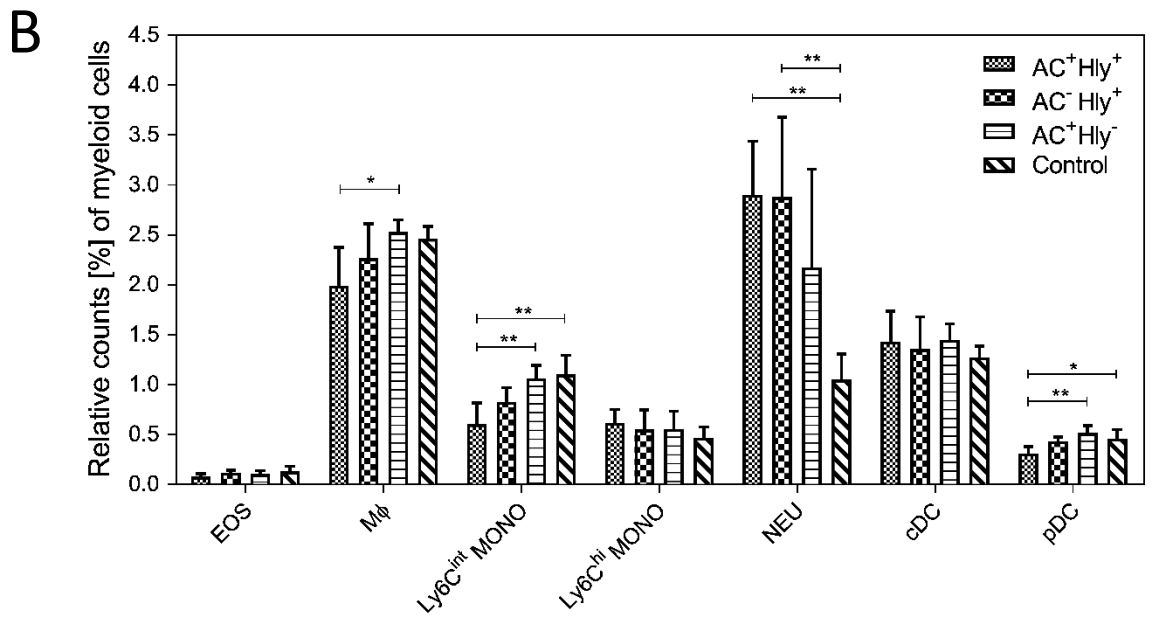
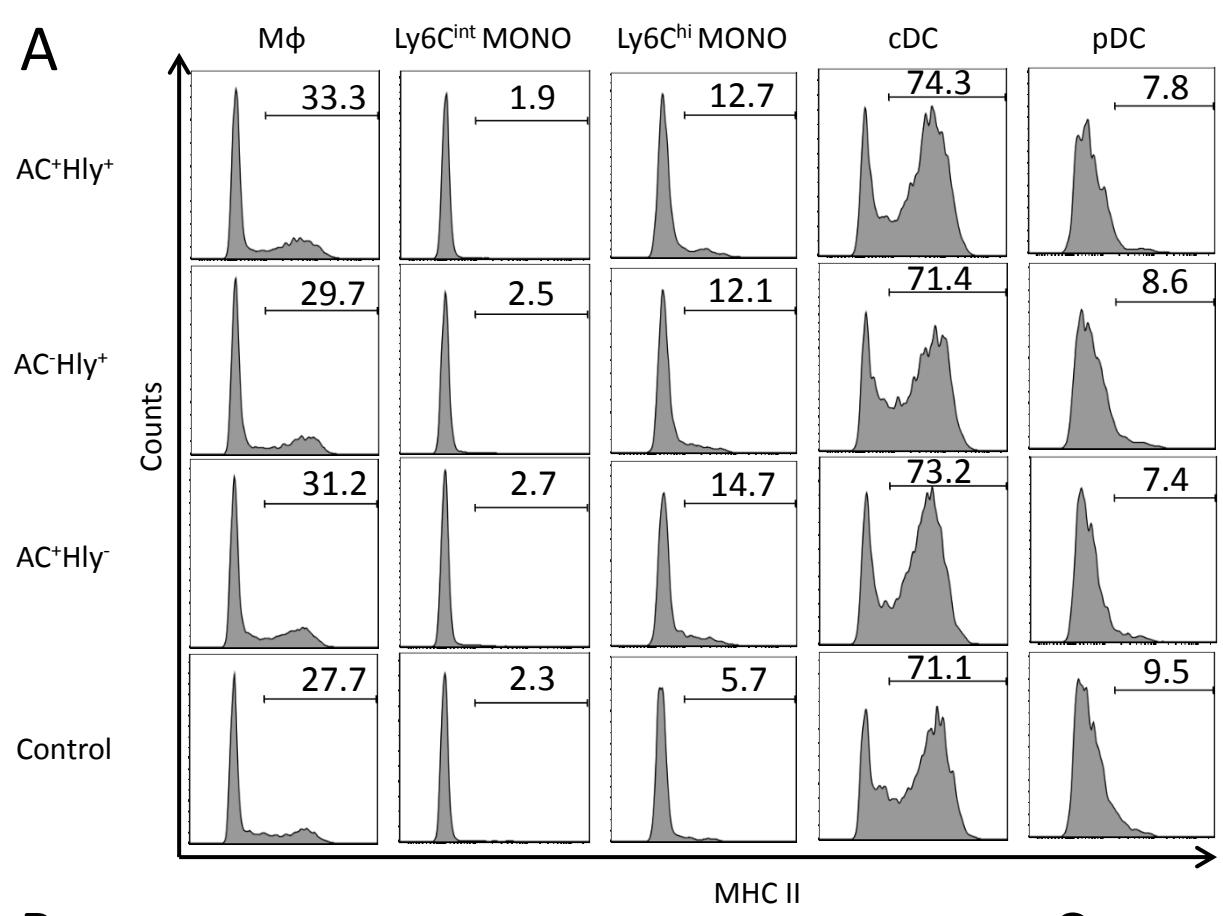
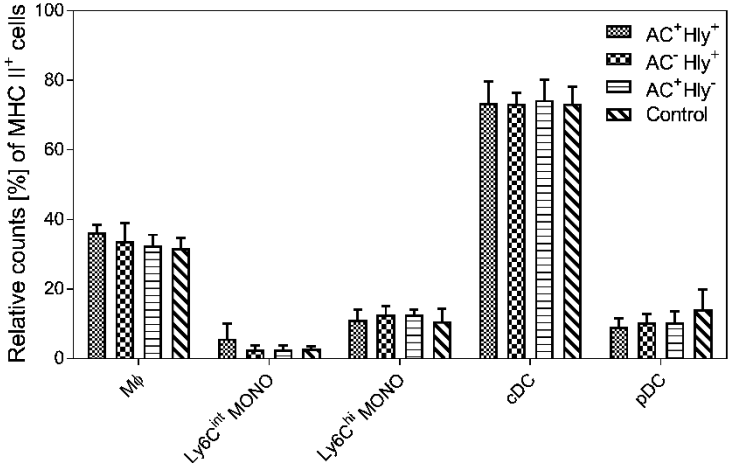


FIG S5 Selected cell subsets distribution in spleens of mice infected with *Bordetella pertussis* 6 days after infection with 1.5 x 10^5 CFU of the various strains (AC^+Hly^+, AC^-Hly^+, AC^+Hly^-) or with medium (Control). A) Dot plots of one representative mouse from each experimental group. B) Relative distribution of cell subsets in spleens in each experimental group (n=5). Groups were compared using ANOVA followed by Tukey test for pairwise comparison of sub-groups; *, **, *** represents p-value <0.05, 0.01 and 0.001, respectively. The experiment was repeated twice with similar results. EOS, eosinophils; Mφ, macrophages; $Ly6C^{int}$ MONO and $Ly6C^{hi}$ MONO, monocytes; NEU, neutrophils; cDC, conventional dendritic cells; pDC, plasmacytoid dendritic cells.





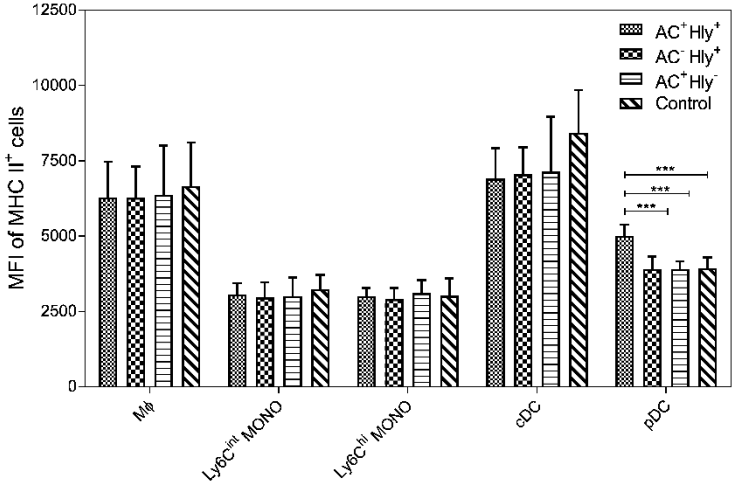


FIG S6 Expression of MHC II on selected cell subsets in spleens of BALB/c mice infected with *Bordetella pertussis* 6 days after infection with 1.5 x 10^5 CFU of the various strains (AC^+Hly^+, AC^-Hly^+, AC^+Hly^-) or with medium (Control). A) Histograms of one representative mouse from each experimental group. B) Relative distribution of MHC II expressing cell subsets in spleens in each experimental group (*n*=5). C) Mean fluorescence intensity (MFI) of MHC II expression on selected cell subsets in spleens in each experimental group (*n*=5). Groups were compared using ANOVA followed by Tukey test for pairwise comparison of sub-groups; *, **, *** represents p-value <0.05, 0.01 and 0.001, respectively. The experiment was repeated twice with similar results. Mφ, macrophages; $Ly6C^{int}$ MONO and $Ly6C^{hi}$ MONO, monocytes; cDC, conventional dendritic cells; pDC, plasmacytoid dendritic cells.

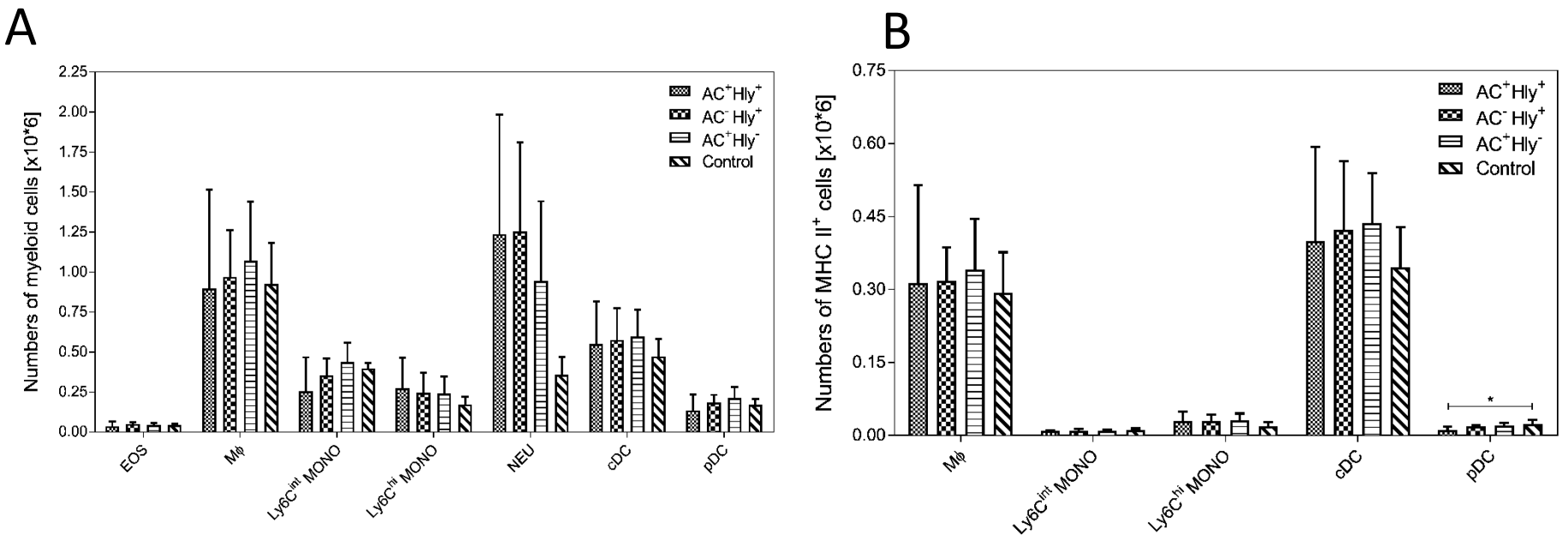


FIG S7 Selected cell subsets distribution in lungs and spleens of BALB/c mice infected with *Bordetella pertussis* 6 days after infection with 1.5 x 10^5 CFU of the various strains (AC^+Hly^+, AC^-Hly^+, AC^+Hly^-) or with medium (Control). A) Distribution of cell subsets in lungs (upper graph) and spleens (lower graph) in each experimental group (*n*=5). B) Distribution of MHC II^+ cell in lungs (upper graph) and spleens (lower graph) in each experimental group (*n*=5). Groups were compared using ANOVA followed by Tukey test for pairwise comparison of sub-groups; *, **, *** represents p-value <0.05, 0.01 and 0.001, respectively. The experiment was repeated twice with similar results. EOS, eosinophils; Mφ, macrophages; $Ly6C^{int}$ MONO and $Ly6C^{hi}$ MONO, monocytes; NEU, neutrophils; cDC, conventional dendritic cells; pDC, plasmacytoid dendritic cells.