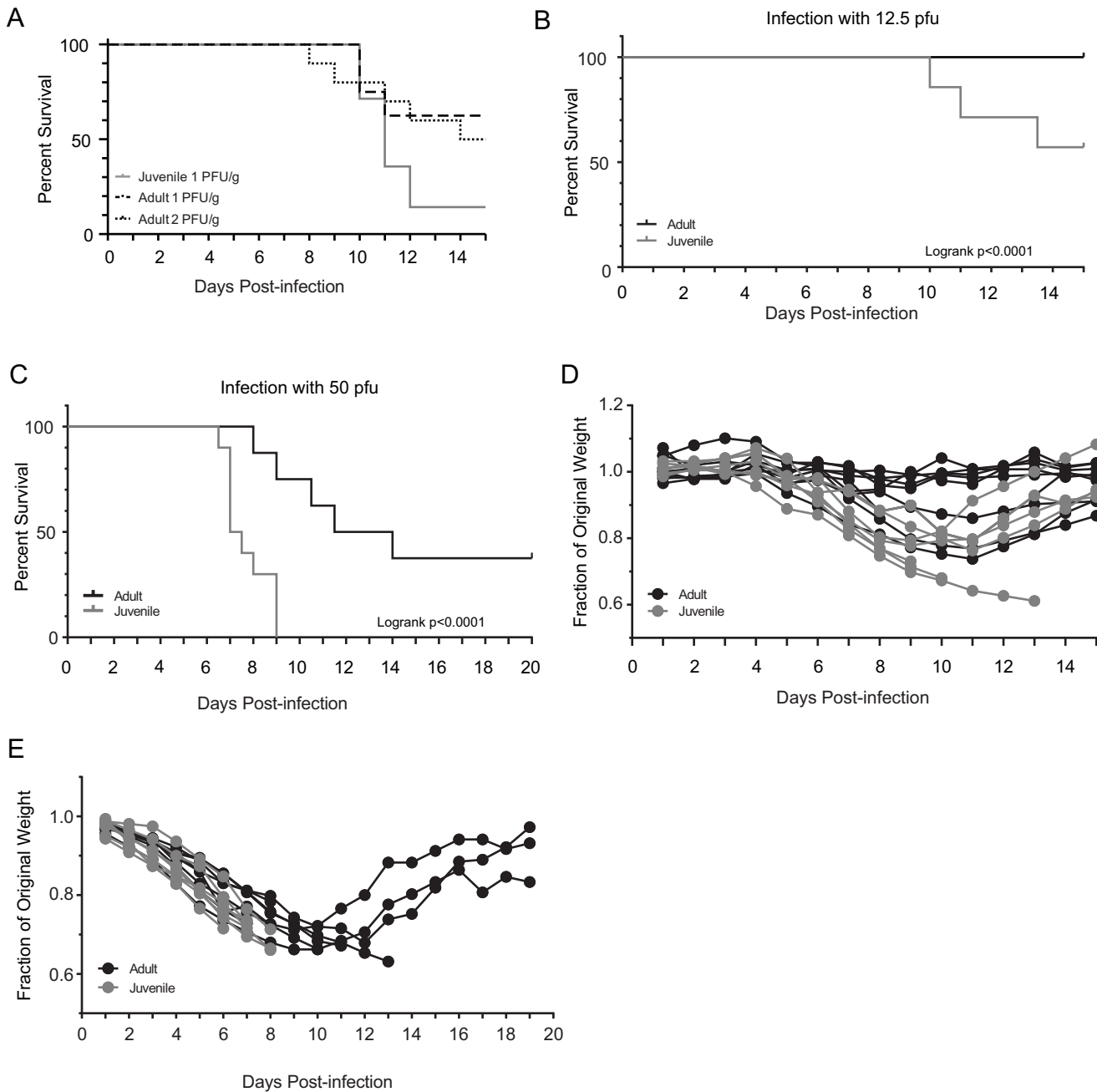
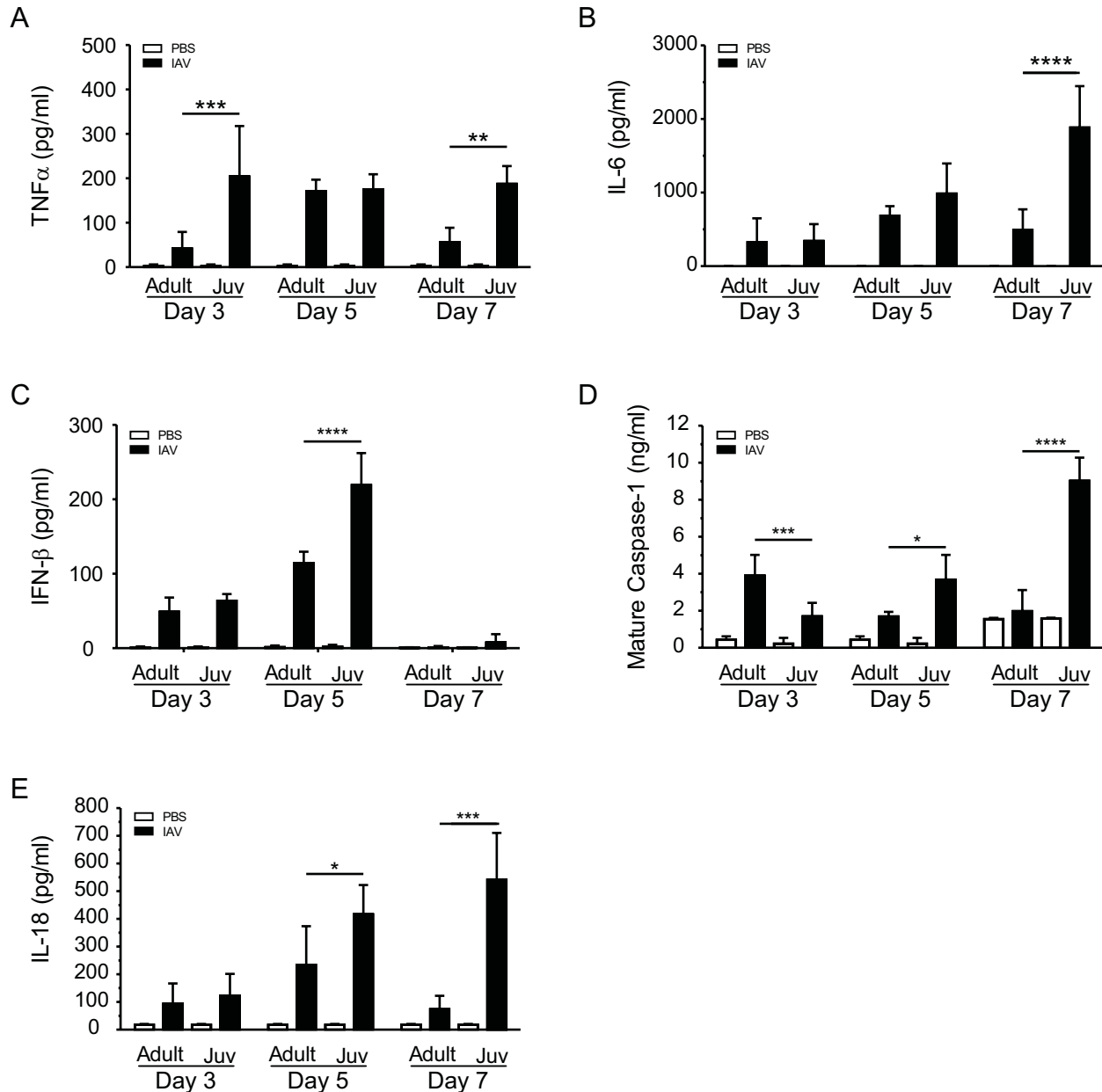


Supplementary figure 1

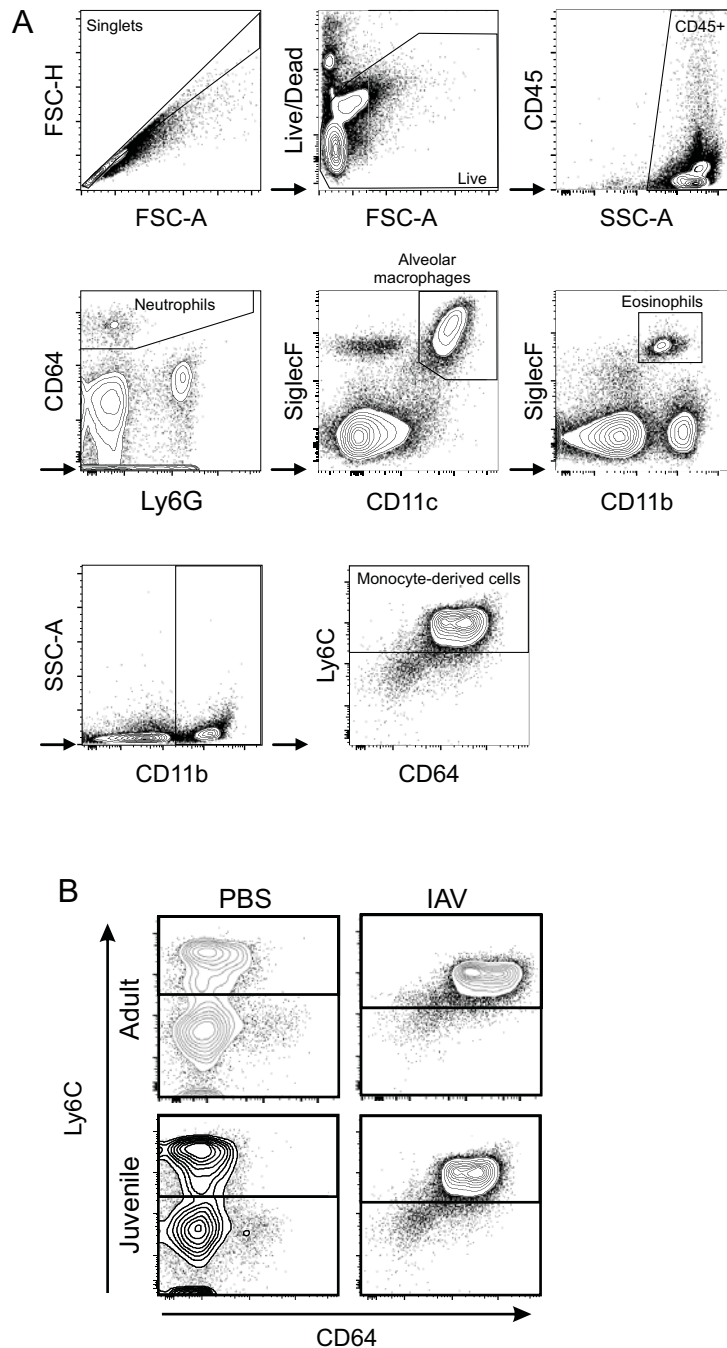


Supplementary Figure 1: Juvenile mice were infected intratracheally (i.t.) with WSN 1 PFU/g of body weight and adult mice were infected i.t. with either WSN 1 PFU/g body weight or WSN 2 PFU/g body weight and A) survival was monitored (n=8-14 mice per group, combined data from 3 independent experiments). Survival of juvenile and adult mice infected i.t. with B) 12.5 PFU WSN and C) 50 PFU WSN. Corresponding weight loss for mice infected with D) 12.5 PFU WSN and E) 50 PFU WSN. (n=7-15 mice per group, combined data from 3 independent experiments). Mantel-Cox log-rank test $p < 0.05$ juvenile versus adult.

Supplementary figure 2

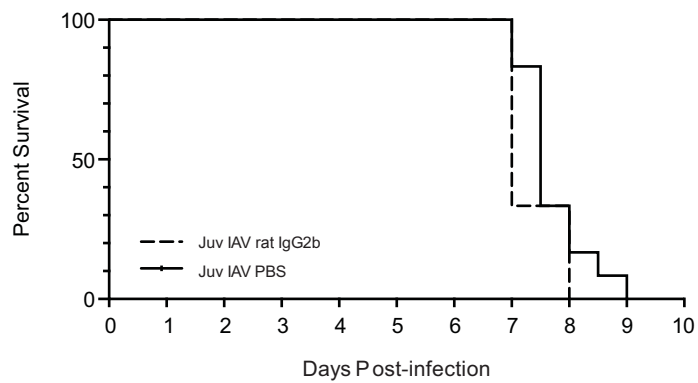


Supplementary Figure 2: Juvenile mice were infected intratracheally with 25 pfu WSN IAV or PBS control. Proteins were measured by ELISA in BALF at 3, 5, and 7 days p.i. A) TNF- α B) IL-6 C) Type I IFN D) Caspase-1 E) IL-18. Data are from 2-3 independent experiments of n= 8-10 mice per group and presented as mean \pm SD. (*) p <0.05, (**) p <0.01, (***) p <0.001, (****) p <0.0001 relative to juvenile versus adult by two-way ANOVA with correction provided by the Sidak test for multiple comparisons.



Supplementary Figure 3: Gating strategy used to identify myeloid-cell subsets in the lungs of juvenile and adult mice treated with i.t. PBS or infected with i.t. WSN 25 PFU. Cells were isolated from enzymatically digested lungs, doublets and debris were excluded, and immune cells were identified by CD45 staining. Representative images come from juvenile mouse 7 days p.i. (25 PFU WSN) A) Sequential gating strategy used to identify populations expressing specific markers: neutrophils (CD11b+Ly6G+), alveolar macrophages (SiglecF+CD11b-CD11c+CD64+), eosinophils (Siglec F+CD11b+CD11c-), and recruited monocytes (CD11b+Ly6C+CD64+/-). B) Representative images of juvenile and adult Ly6C+CD64+/- cells in uninfected and infected mice.

Supplementary figure 4



Supplementary Figure 4: Juvenile mice were infected intratracheally (i.t.) with WSN 25 PFU and given either rat IgG2b or and equal volume of PBS retro-orbitally (r.o.) and survival was monitored (n=4-8) mice per group. Mantel-Cox log-rank test did not show a significant difference between the two survival curves ($p > 0.05$).