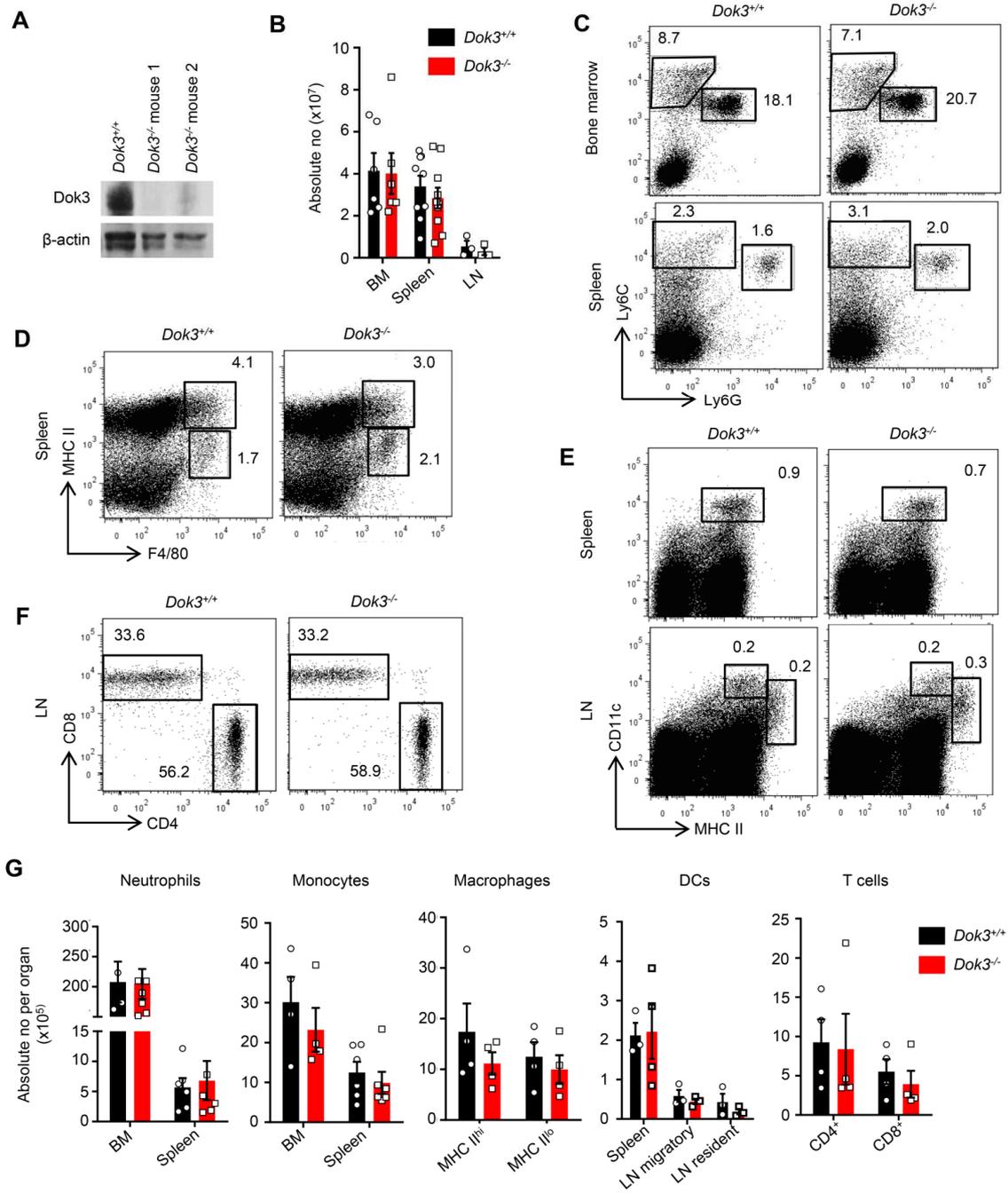
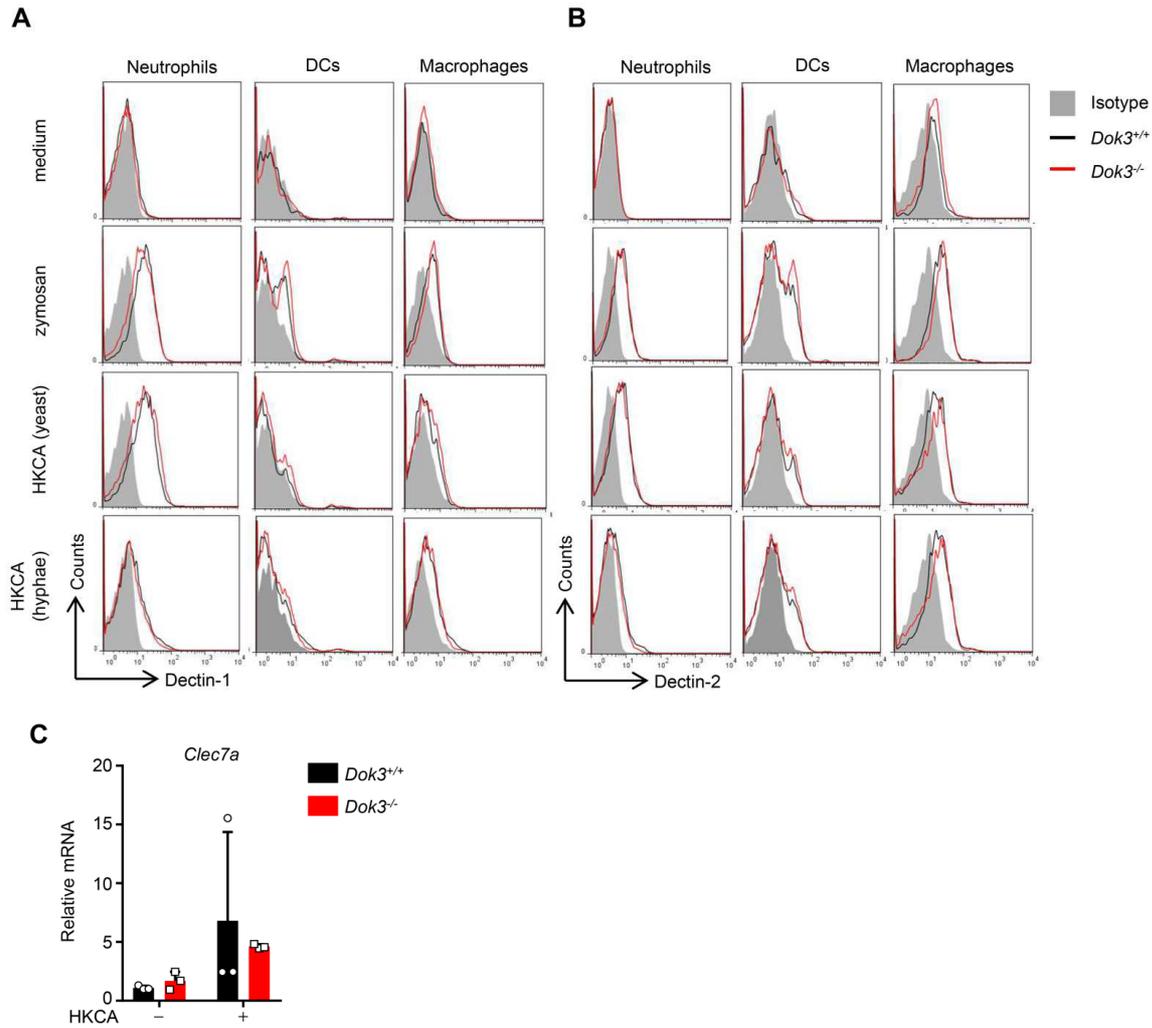


## Supplemental Materials

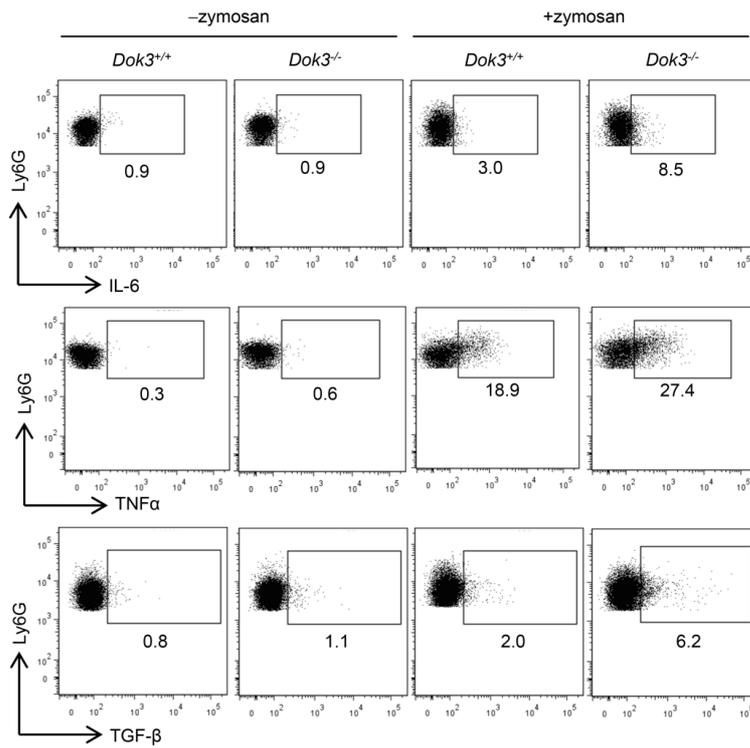


**Supplemental Figure 1. Immune cell subsets in *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> mice.** (A) Immunoblot analysis of Dok3 expression in lysates from purified *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> bone marrow cells. β-actin was used as loading control. Images are representative of three independent experiments. (B) Total cell counts of bone marrow (BM) (n=6), spleen (n=9) and lymph nodes (LN) (n=3) from *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> mice. Data is pooled from >3 independent experiments. Data is shown as mean±s.e.m. (C) Flow cytometric analysis of monocytes (Ly6G<sup>-</sup> Ly6C<sup>+</sup>) and neutrophils (Ly6G<sup>+</sup> Ly6C<sup>+</sup>) in BM and

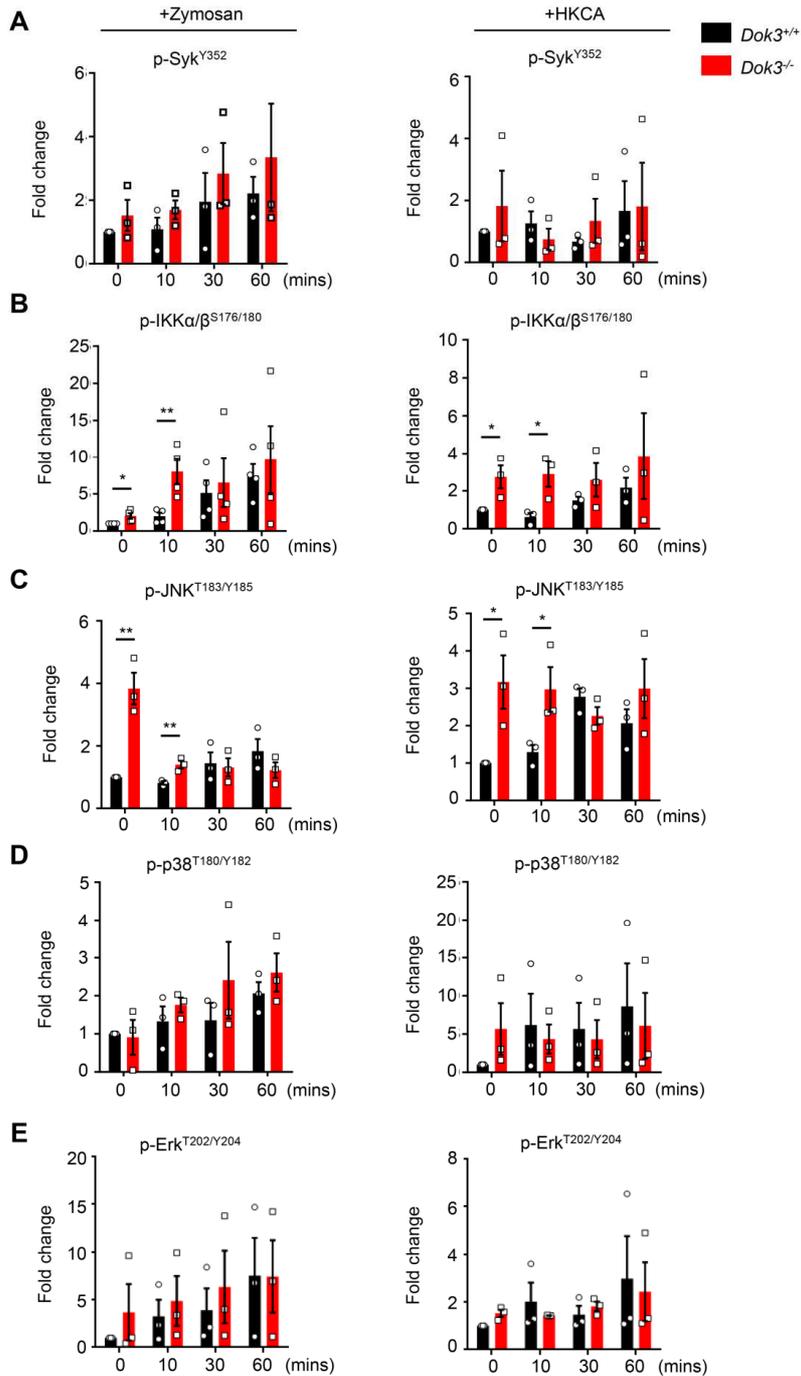
spleen. Dot plots are pre-gated on singlet, live cells. Images are representative of >5 independent experiments. (D) Flow cytometric analysis of macrophages (F4/80<sup>+</sup> MHC II<sup>lo/hi</sup>) in spleen. Dot plots are pre-gated on singlet, live cells. Images are representative of 3 independent experiments. (E) Flow cytometric analysis of resident (CD11c<sup>+</sup> MHC II<sup>+/lo</sup>) and migratory (CD11c<sup>+</sup> MHC II<sup>hi</sup>) DCs in spleen and LNs. Dot plots are pre-gated on singlet, live cells. Images are representative of 3 independent experiments. (F) Flow cytometric analysis of CD4<sup>+</sup> and CD8<sup>+</sup> T cells in LNs. Dot plots are pre-gated on singlet, live, TCRβ<sup>+</sup> cells. Images are representative of 3 independent experiments. (G) Total number of neutrophils, monocytes, macrophages, DCs and T cells in BM, spleen and LNs of *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> mice (n=3-5). Data is pooled from >3 independent experiments. Data is shown as mean±s.e.m.



**Supplemental Figure 2. Comparable Dectin-1 and Dectin-2 expression on *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> BM neutrophils, splenic DCs and BM macrophages.** (A) Dectin-1 and (B) Dectin-2 expression were analyzed by surface staining and flow cytometry after stimulation with zymosan (50µg/ml), HKCA in yeast (MOI 2:1) and hyphae form (MOI 2:1). Histograms for neutrophils were pre-gated on singlet, live, Ly6G<sup>+</sup> Ly6C<sup>+</sup> cells. Histograms for DCs were pre-gated on singlet, live, CD11c<sup>+</sup> MHC II<sup>+</sup> cells. Histograms for macrophages were pre-gated on singlet, live, F4/80<sup>+</sup> cells. Filled histograms represent isotype control. One representative out of three independent experiments is shown (n=3). (C) mRNA expression level of *Clec7a* in purified *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> neutrophils with and without HKCA stimulation (MOI 1:2). Data is shown as mean±s.d. (n=3).

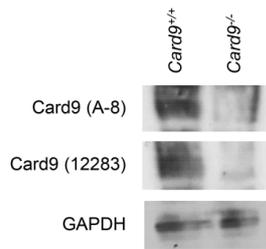


**Supplemental Figure 3. Enhanced cytokines production by *Dok3*<sup>-/-</sup> neutrophils.** Flow cytometric analysis of indicated cytokines production by *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> neutrophils following zymosan stimulation. Dot plots are pre-gated on singlet, live, Ly6G<sup>+</sup> cells. One representative experiment from 3 independent experiments is shown (n=3-4).

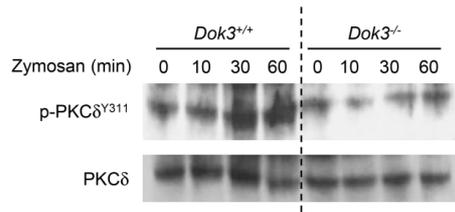


**Supplemental Figure 4. Quantifications of immunoblots in Figure 4.** Purified *Dok3*<sup>+/+</sup> and *Dok3*<sup>-/-</sup> neutrophils were stimulated for various times with zymosan (10μg/ml) (left) or HKCA (MOI 1:1) (right). Bar graphs represent relative amounts of (A) p-Syk<sup>Y352</sup>, (B) p-IKKα/β<sup>S176/180</sup>, (C) p-JNK<sup>T183/Y185</sup>, (D) p-p38<sup>T180/Y182</sup> and (E) p-Erk<sup>T202/Y204</sup> after normalization to total (A) Syk, (B) IKKα/β, (C) JNK, (D) p38 and (E) Erk respectively. Data is pooled from 3-4 independent experiments (n=3-4). Data is shown as

mean±s.e.m. \*p=0.03, 0.04, 0.03, 0.03, 0.05, \*\*p=0.01, 0.005, 0.01 (from left to right, top to bottom),  
unpaired two-tailed Student's t-test.



**Supplemental Figure 5. Specificities of anti-Card9 antibodies.** Immunoblot analysis of Card9 expression in lysates from *Card9*<sup>+/+</sup> and *Card9*<sup>-/-</sup> splenic cells using different clones of anti-Card9 antibodies. GAPDH was used as loading control. Images are representative of three independent experiments.



**Supplemental Figure 6. PKCδ activation in *Dok3<sup>+/+</sup>* and *Dok3<sup>-/-</sup>* neutrophils.** Immunoblot analysis of phosphorylated PKCδ (p- PKCδ<sup>Y311</sup>) and PKCδ in purified *Dok3<sup>+/+</sup>* and *Dok3<sup>-/-</sup>* neutrophils stimulated for various times with zymosan (10μg/ml). Images are representative of three independent experiments.