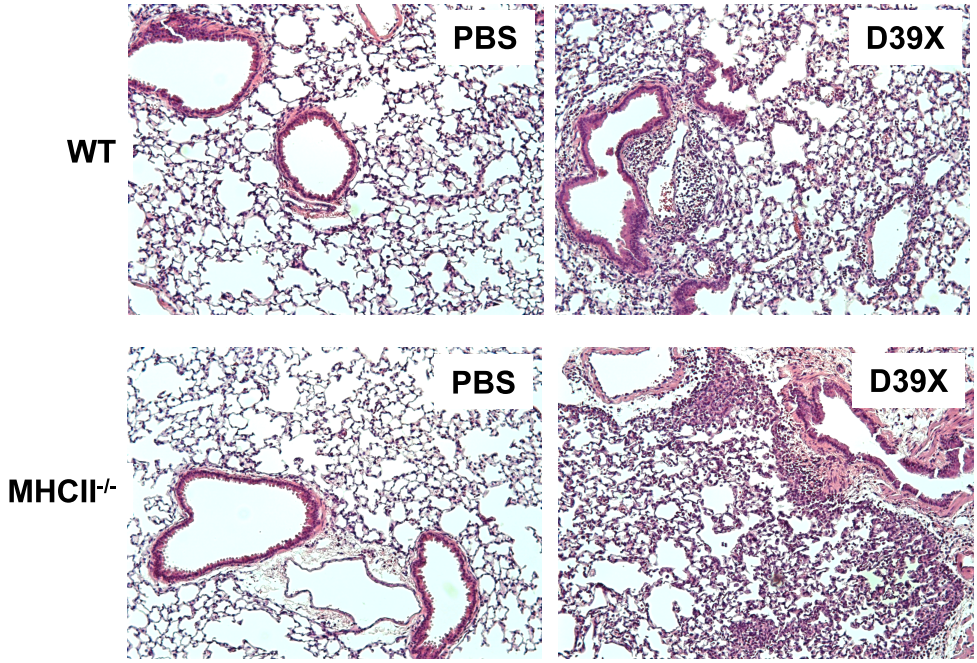

FIG. S1. Histopathological changes in the lungs of WT and MHC class II-deficient mice upon pneumococcal infection

6 week old C57Bl/6J (WT) and MHC class II-deficient mice ($MHCII^{-/-}$) were i.n. challenged with PBS or $1x10^6$ CFU D39X. Mice were sacrificed 48 h post-challenge, and paraffin-embedded lung sections were stained with hematoxylin and eosin and analyzed microscopically (10x magnification).

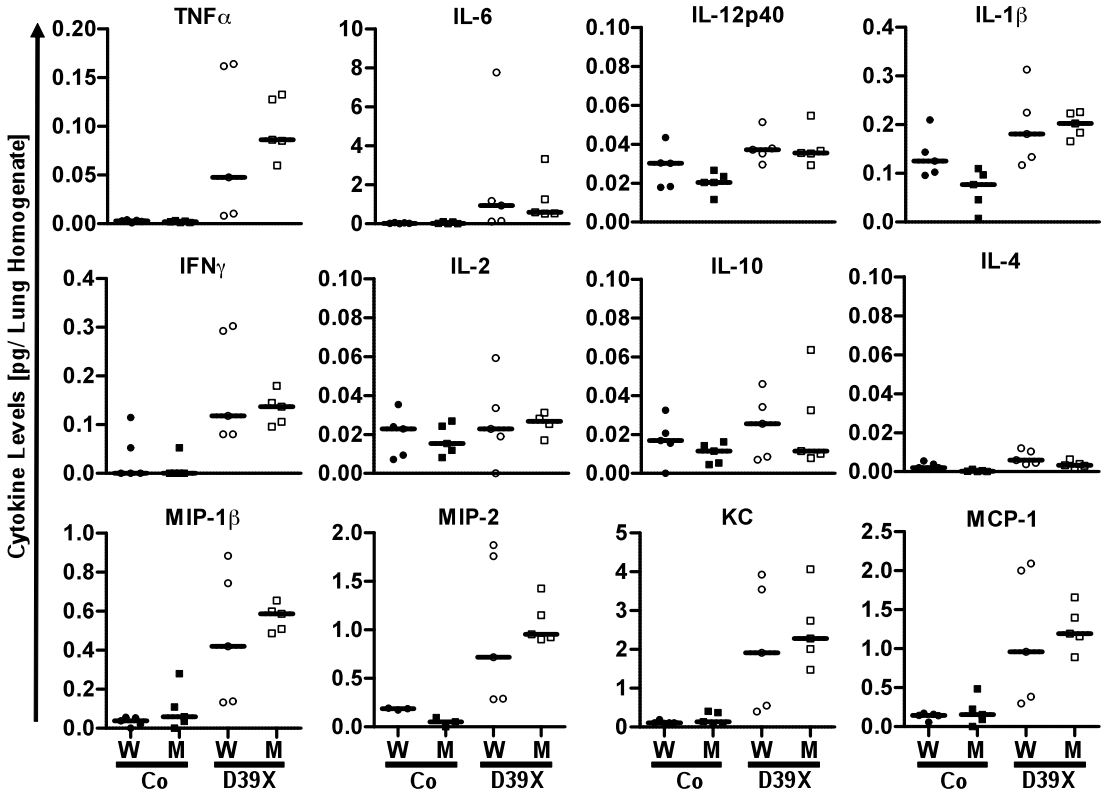

FIG. S2. Levels of cytokines and chemokines in lung homogenates 24h after pneumococcal infection.

C57Bl/6J (W) and MHC class II-deficient mice (M) were challenged i.n. with PBS (control: Co) or $1x10^6$ CFU D39X, and lungs were harvested after 24 h. Lung homogenates were prepared and cytokine levels determined by multiplex analysis, n=5.

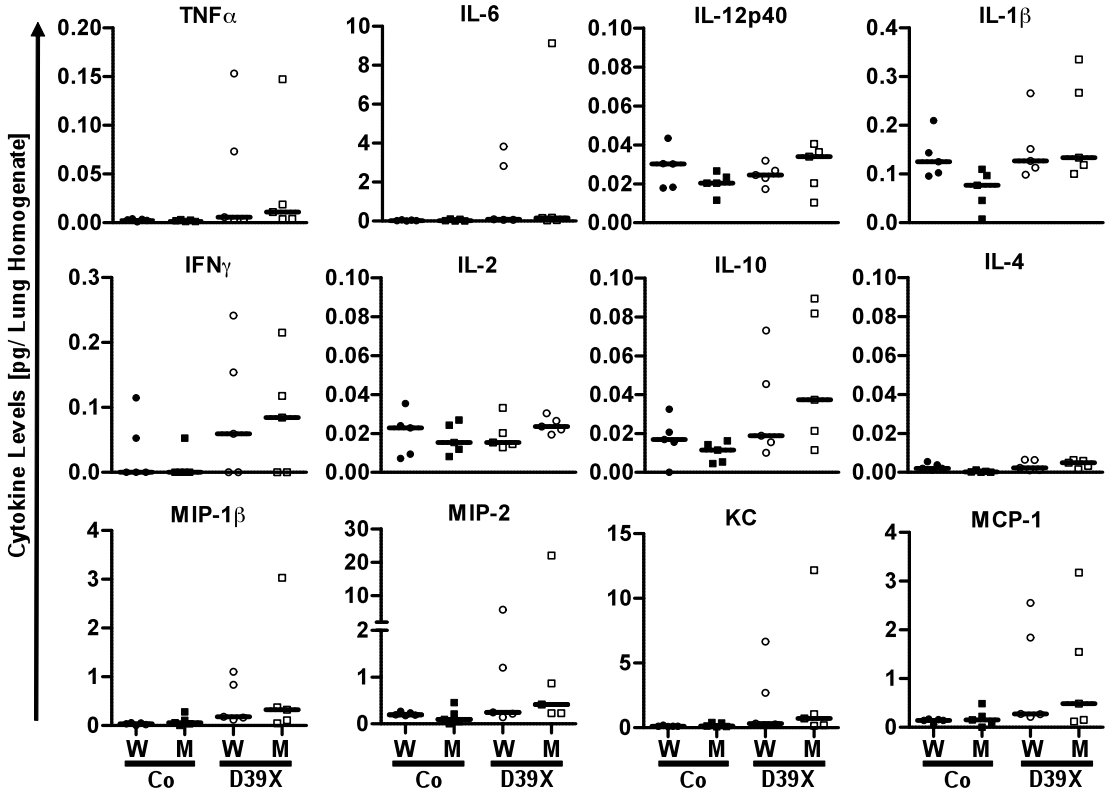

FIG. S3. Levels of cytokines and chemokines in lung homogenates 48h after pneumococcal infection.

C57Bl/6J (W) and MHC class II-deficient mice (M) were challenged i.n. with PBS (control: Co) or $1x10^6$ CFU D39X, and lungs were harvested after 48 h. Lung homogenates were prepared and cytokine levels determined by multiplex analysis, n=5.

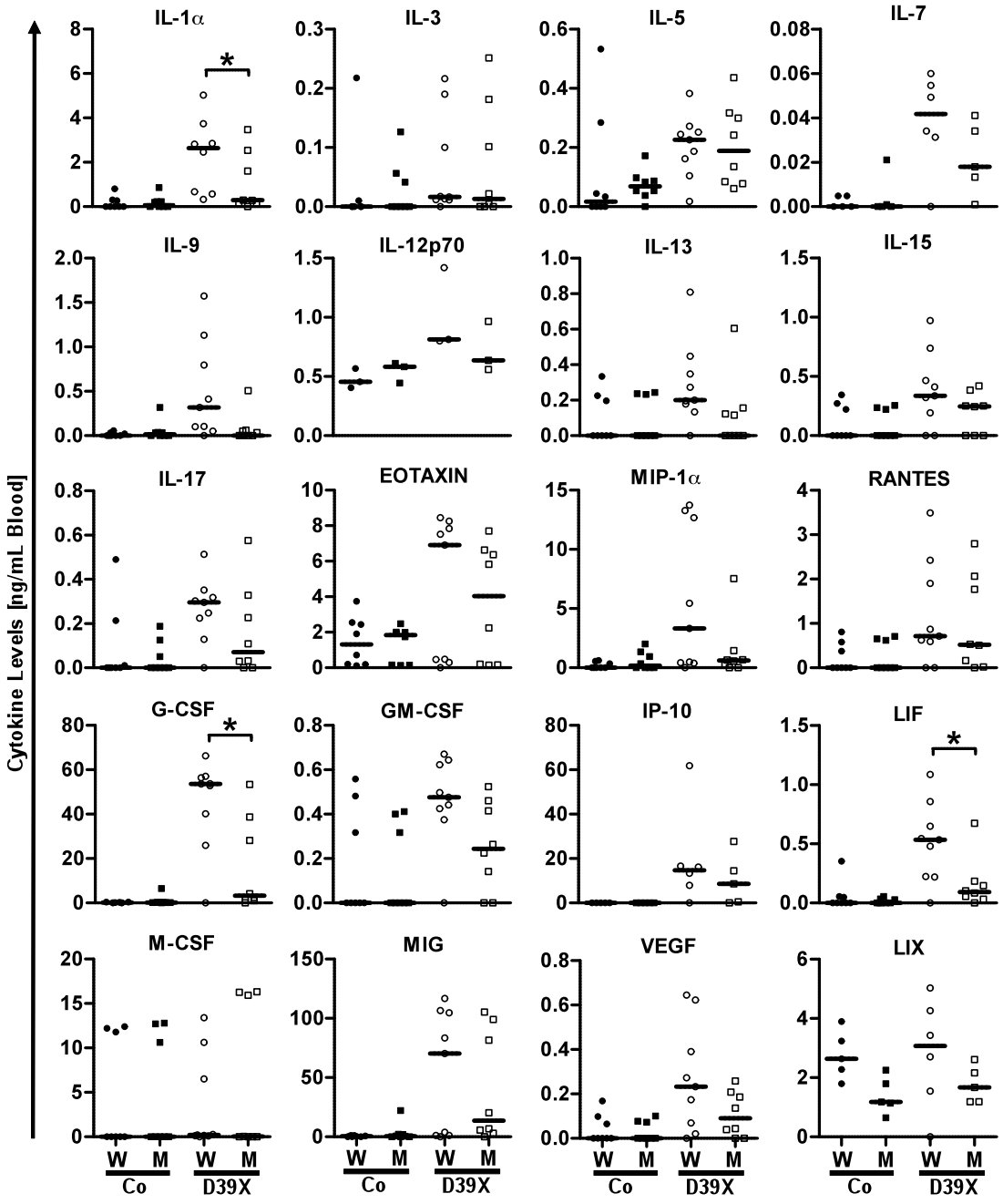

FIG. S4. Levels of cytokines and chemokines in the serum of WT and MHC class II-deficient mice 48h after infection

C57Bl/6J (W) and MHC class II-deficient mice (M) were challenged i.n. with PBS (control: Co) or $1x10^6$ CFU D39X. (A) Cytokine levels in serum were determined by multiplex analysis after 48 h, n=5-9, * $p<0.05$ (Mann-Whitney).

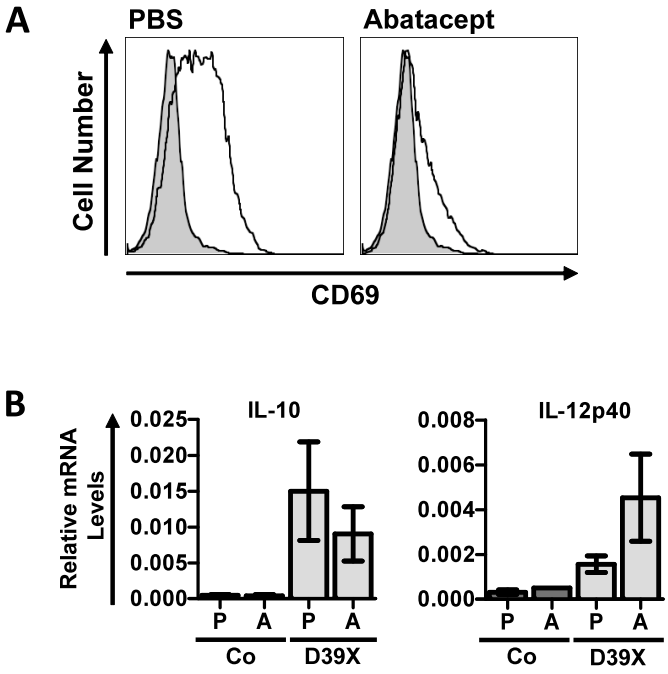

FIG. S5. Effect of Abatacept on pneumococci-induced CD4+ T-cell activation and cytokine mRNA levels

6 week C57Bl/6J were challenged i.n. with PBS (control: Co) or $1x10^6$ CFU D39X. After 24 h, mice were i.p. injected with 30 mg/kg Abatacept (A) or PBS (P). Spleens were harvested 48 h after bacterial challenge. (A) CD69 expression was determined by flow cytometry on CD4+ T-cells of un-infected (filled histograms) and infected (open histograms) mice treated with PBS or Abatacept. 1 representative mouse of 3 is shown for each group and treatment. (B) Splenocyte mRNA levels of IL-10 and IL-12p40 were determined by quantitative PCR analysis. Bars represent means with standard error, n=2-3 (Co), n=3-4 (D39X).