## Supplemental Figures

**Figure S1**

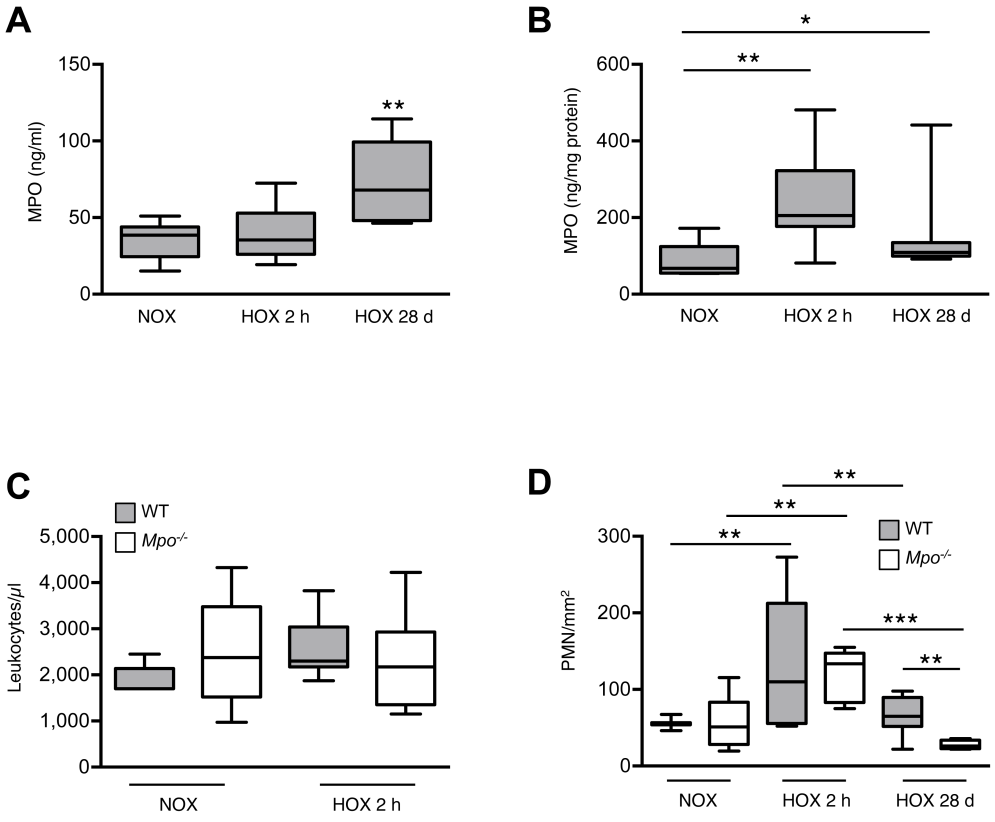


**Fig. S1: Plasma and lung myeloperoxidase and leukocytes after short- and long-term hypoxia.** Hypoxia induces myeloperoxidase (MPO) secretion and neutrophil recruitment. (A) MPO plasma levels in WT mice after normoxia (NOX) or 2 h or 28 d of hypoxia (HOX) were assessed by ELISA. *n* = WT NOX 12, WT HOX 2 h/ 28 d 8 mice. (B) MPO concentration was determined by ELISA in lung homogenates of WT mice after NOX or 2 h or 28 d of HOX. *n* = WT NOX 5, WT HOX 2 h 8, 28 d 9 mice. (C) Total leukocyte counts were determined. *n* = WT NOX 5, *Mpo*$^{-/-}$ NOX 6, WT and *Mpo*$^{-/-}$ HOX 2 h 8 mice. (D) Infiltration of polymorphonuclear neutrophils (PMN) in lung sections of WT and *Mpo*$^{-/-}$ mice as assessed by Ly6G staining. *n* = WT NOX/ *Mpo*$^{-/-}$ HOX 2 h 8, *Mpo*$^{-/-}$ NOX 5, WT HOX 2 h 7, WT HOX 28 d 6, *Mpo*$^{-/-}$ HOX 28 d 4 mice. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. All data are presented as median with interquartile range, whiskers indicate minimum to maximum. Statistical analysis was performed with ANOVA followed by LSD post hoc test.

**Figure S2**

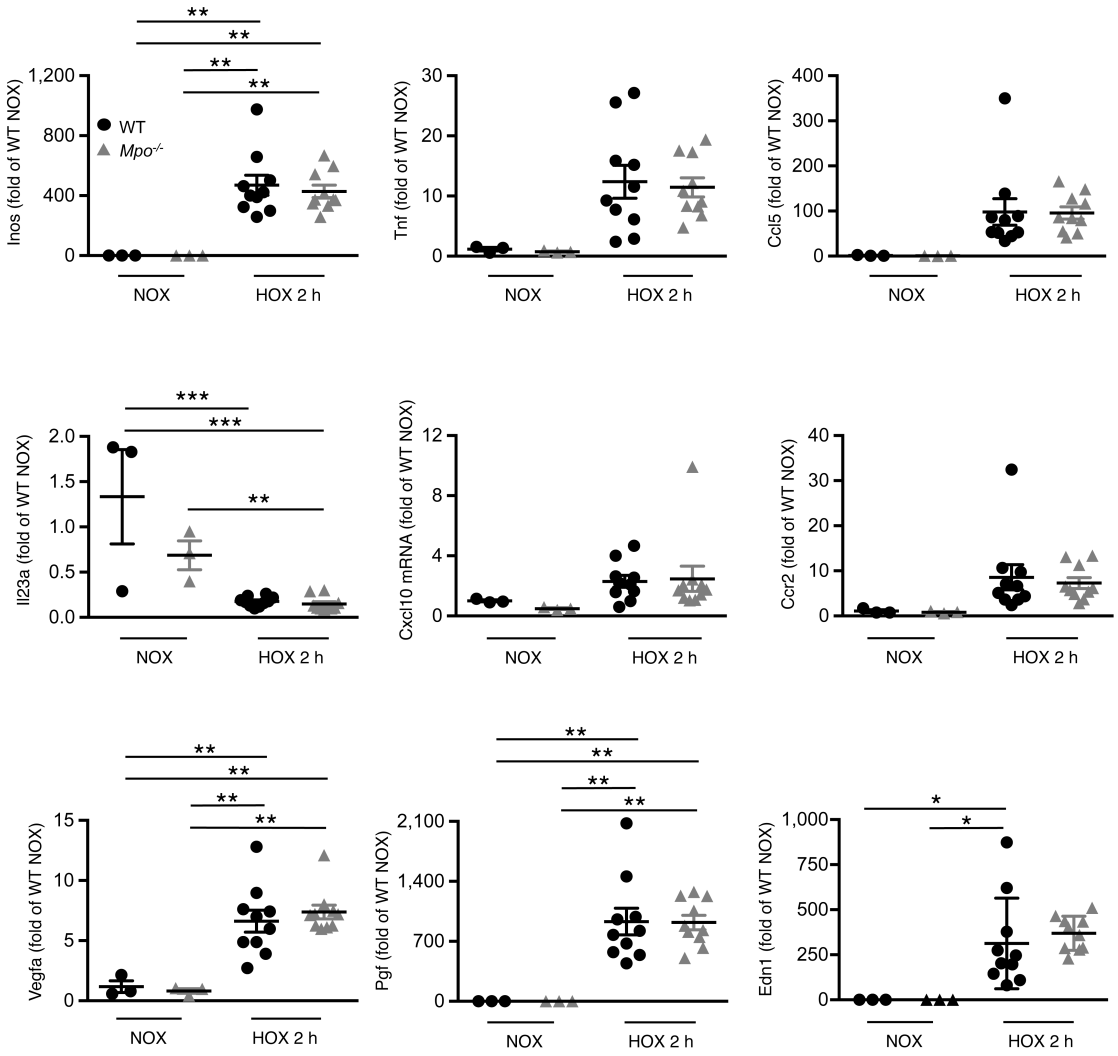


**Fig. S2: Pulmonary mRNA levels of inflammation-related genes.** Hypoxia for 2 hours increased mRNA for molecules related to inflammation in WT and *Mpo*$^{-/-}$ mice. Change in mRNA for inducible NO-synthase (Inos), TNF-alpha (Tnf), CC-chemokine ligand 5 (Ccl5), Il23a, Cxcl10, Ccr2, Vegfa, placental growth factor (Pgf) and endothelin-1 (Edn1) relative to WT NOX mice in lung homogenates of WT and *Mpo*$^{-/-}$ mice after normoxia (NOX) or 2 h of hypoxia (HOX). *n* = WT and *Mpo*$^{-/-}$ NOX 3, HOX 10 mice. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. All data are presented as mean ± SEM. Statistical analysis was performed with ANOVA followed by LSD post hoc test.

**Figure S3**

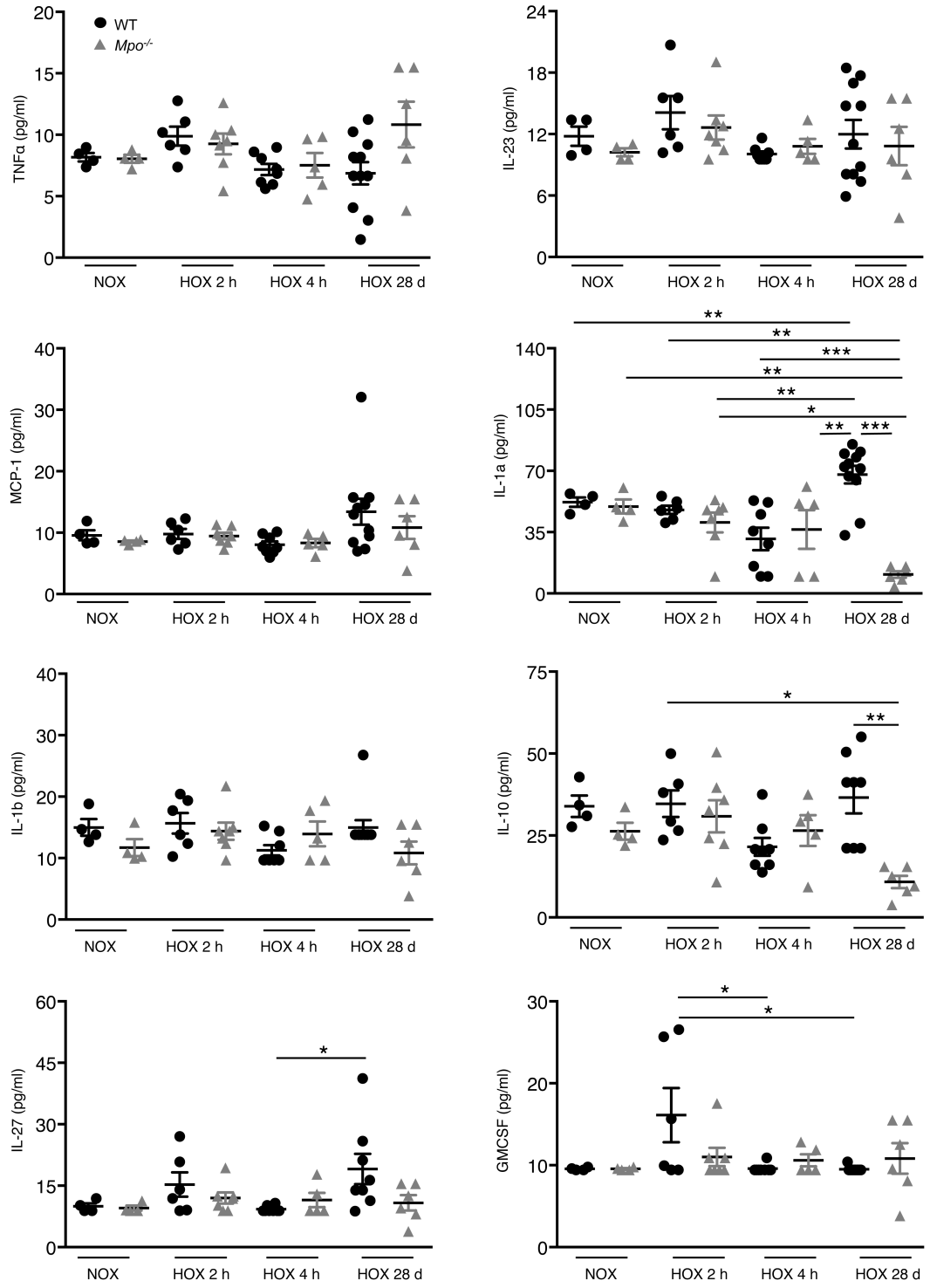


**Fig. S3: Concentration of cytokines in lung homogenates.** Pulmonary cytokine levels were not influenced by myeloperoxidase (MPO). Concentration of TNF-alpha, IL-23, monocyte chemoattractant protein-1 (MCP-1), IL-1a, IL-1b, IL-10, IL-27 and granulocyte monocyte colony-stimulating factor (GMCSF) in lung homogenates of WT and *Mpo*$^{-/-}$ mice after normoxia (NOX) or 2 h, 4 h, or 28 d of hypoxia (HOX). *n* = WT and *Mpo*$^{-/-}$ NOX 4, WT HOX 2 h 6, *Mpo*$^{-/-}$ HOX 2 h 7, WT HOX 4 h 8, *Mpo*$^{-/-}$ HOX 4 h 5, WT HOX 28 d 11, *Mpo*$^{-/-}$ HOX 28 d 6 mice. * $P < 0.05$, ** $P < 0.01$. All data are presented as mean ± SEM. Statistical analysis was performed with ANOVA followed by LSD post hoc test.

**Figure S4**

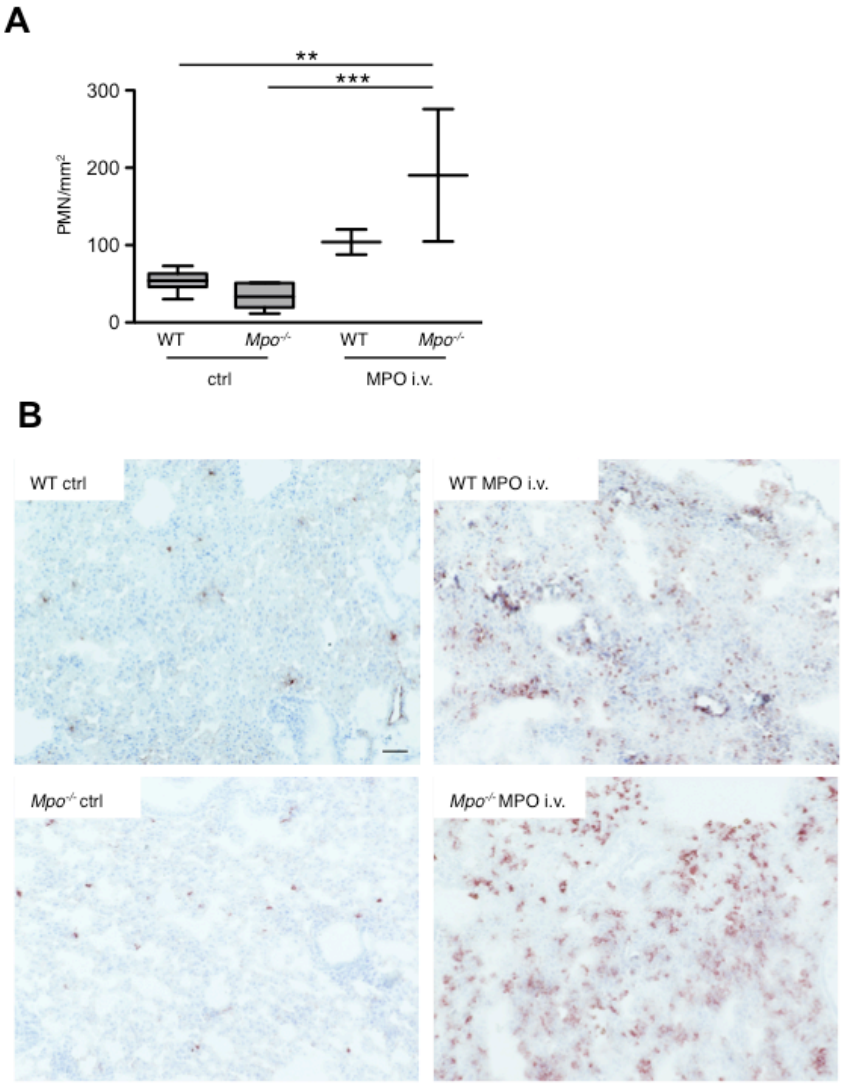


**Fig. S4: Pulmonary infiltration of neutrophils upon infusion of myeloperoxidase.** Myeloperoxidase **(**MPO) induces increase in neutrophil infiltration in lungs of WT and *Mpo*$^{-/-}$ mice. (A) MPO was infused to the jugular vein of WT and *Mpo*$^{-/-}$ mice for 7 d using osmotic minipumps connected to a jugular vein catheter. Neutrophils were stained in lung sections using an antibody to Ly6G (brown). Representative images are shown. Scale bar = 50 µm. (B) Neutrophil infiltration was quantified. *n* = WT/ *Mpo*$^{-/-}$ ctrl 2; WT MPO i.v. 7; *Mpo*$^{-/-}$ MPO i.v. 6 mice, ** $P < 0.01$, *** $P < 0.001$. Data are presented as median with interquartile range, whiskers indicate minimum to maximum. Statistical analysis was performed with ANOVA followed by LSD post hoc test.