SUPPLEMENTARY INFORMATION

# H-ferritin produced by myeloid cells is released to the circulation and plays a major role in liver iron distribution during infection

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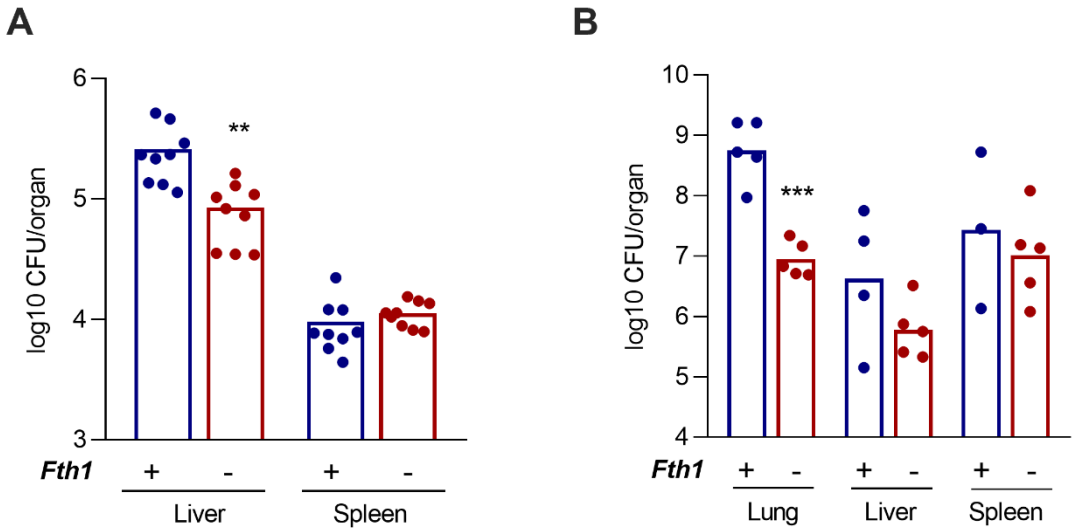


**Figure S1.** Mice deficient in H-ferritin in the myeloid cells are more resistant in different models of *M. avium* infection. (**a**) *Fth1*$^{+/+}$ (blue) and *Fth1*$^{-/-}$ (red) mice were intravenously infected with $10^6$ CFU of *M. avium* 2447 SmT. Bacterial burden in the liver and spleen, 60 days post infection (N=9). (**b**) *Fth1*$^{+/+}$ (blue) and *Fth1*$^{-/-}$ (red) mice were infected via aerosol with a low dose (~100 CFU/lung) of *M. avium* 25291. Bacterial burden in the lung, liver and spleen, 125 days post infection. (N=4 to 5). Bars represent the mean and the circles represent each animal. Statistics: multiple t-test. **P<0.01, ***P<0.001 when comparing between genotypes.

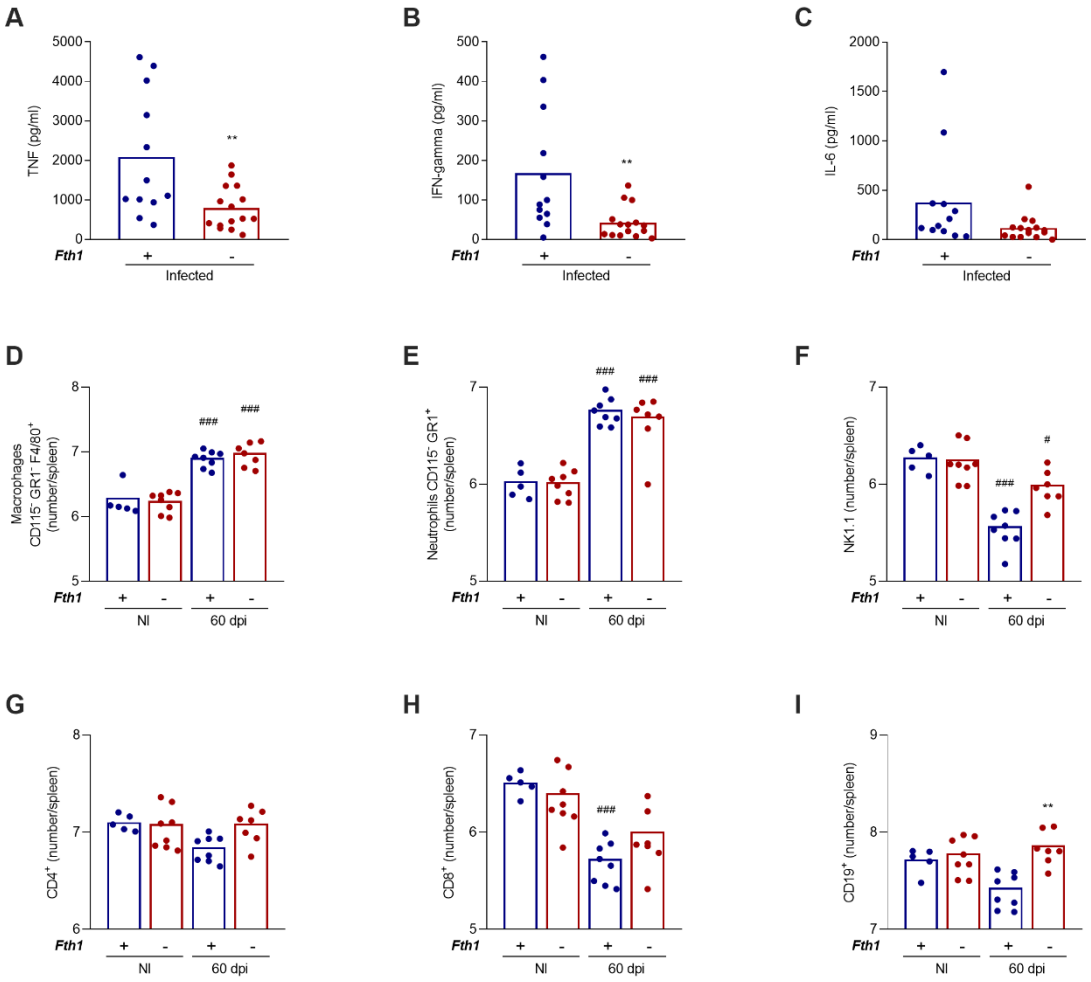


**Figure S2.** *Fth1*$^{-/-}$ mice have lower levels of inflammatory cytokines in circulation and spleen cell populations are not dependent of FTH1 expression. (**a**) TNF-alpha, (**b**) IFN-gamma, (**c**) IL-6 were measured in the serum of the mice from the survival curve, using a cytometric bead array mouse inflammation kit (N = 12 (*Fth1*$^{+/+}$) or 16 (*Fth1*$^{-/-}$)). (**d-i**) Number of macrophages (GR1-F4/80+), neutrophils (CD115-GR1+), NK1.1, CD4+, CD8+, CD19+ CD19+, NK1.1, CF4+, CD8+ cells in the spleen 60 days post infection (N=5 to 8). Bars represent the mean and the circles represent each animal. Statistical analysis was performed by two-way ANOVA with Sidak multiple comparison post hoc test. **P<0.01 when comparing between genotypes, ###P<0.001 when assessing the effect of infection within the same genotype.

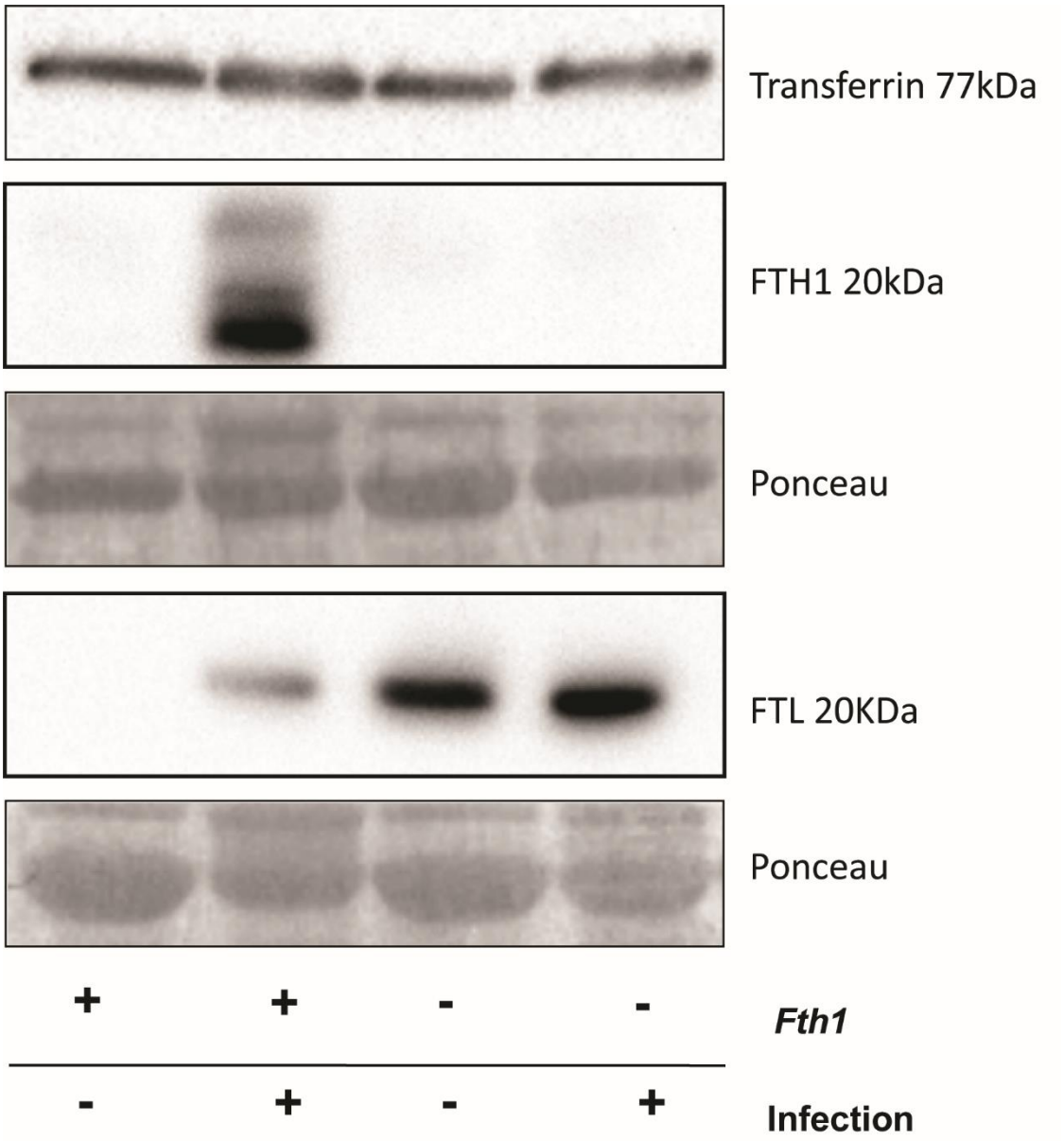


**Figure S3.** During *M. avium* infection, *Fth1*$^{+/+}$ mice have high amount of FTH1 in the serum. Western Blot against transferrin, FTH1 and FTL subunits. Ponceau staining was used to stain all proteins in the gel, as a confirmation that all lanes were loaded with equivalent amounts of protein.