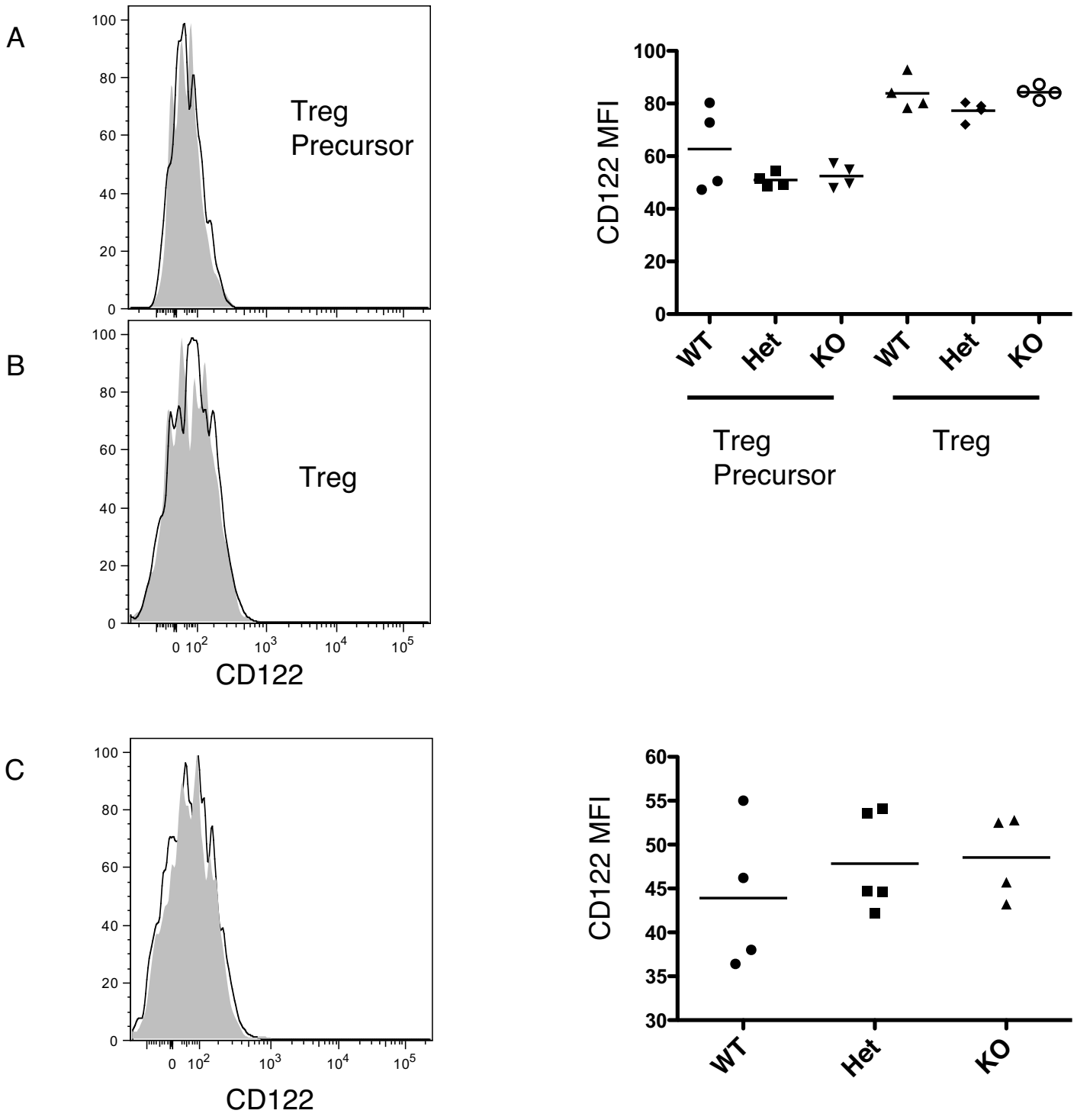
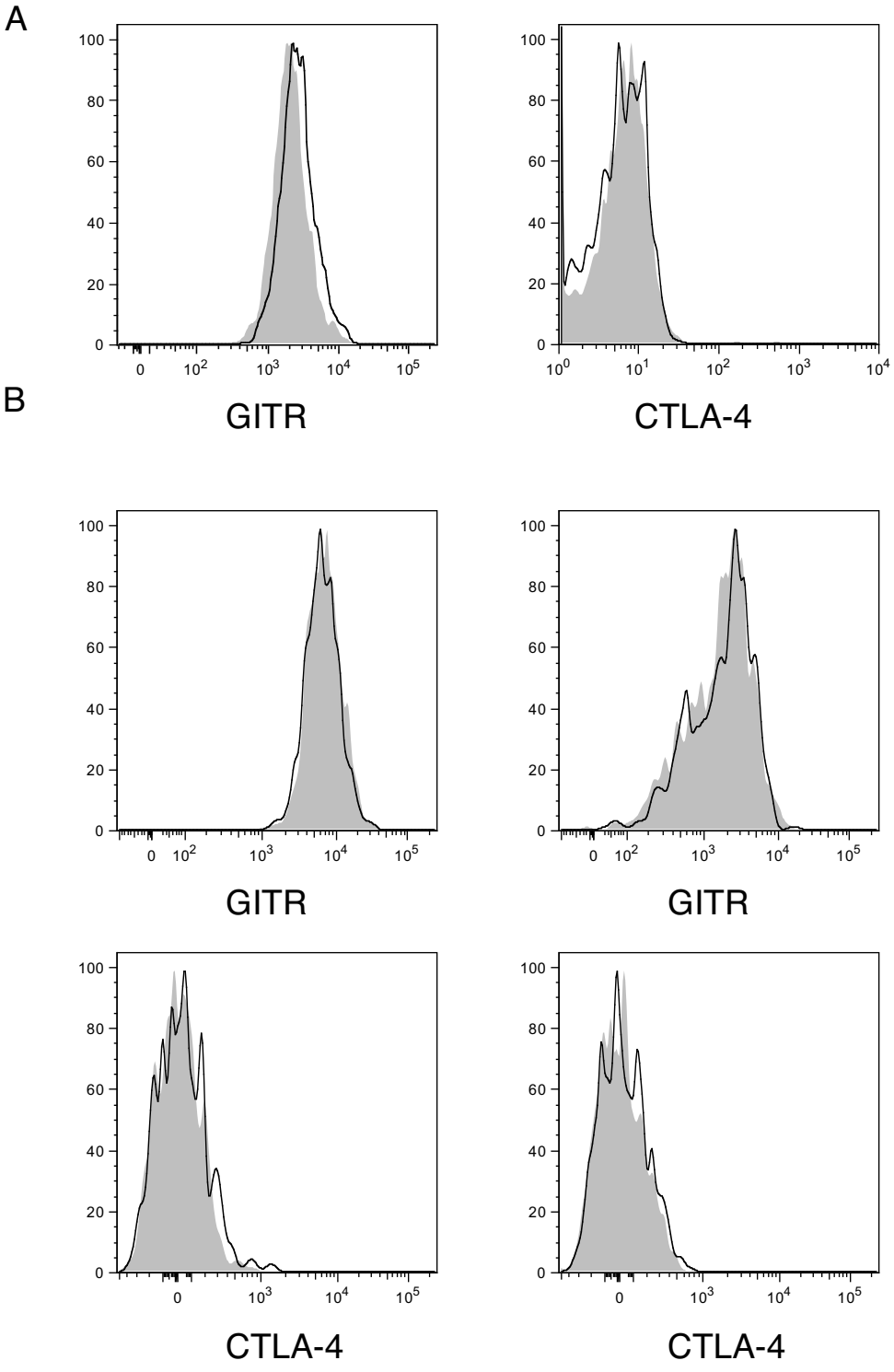
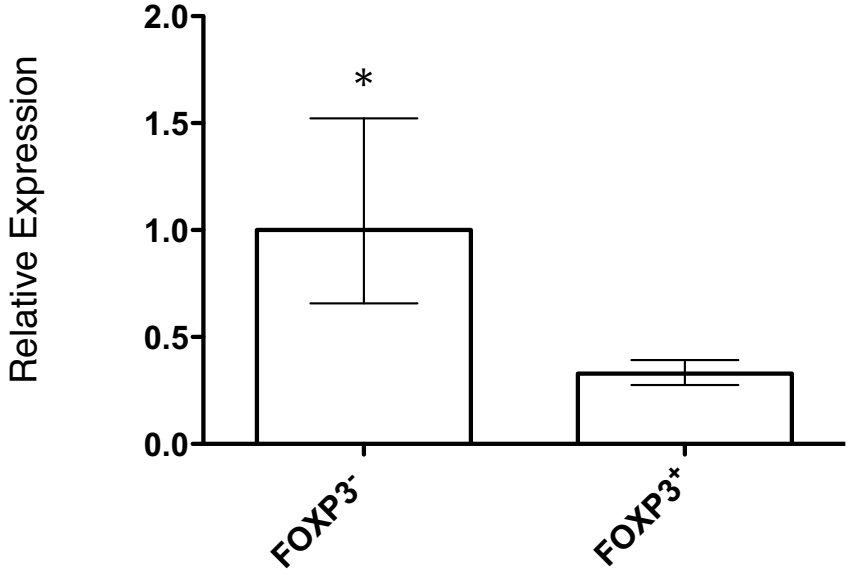


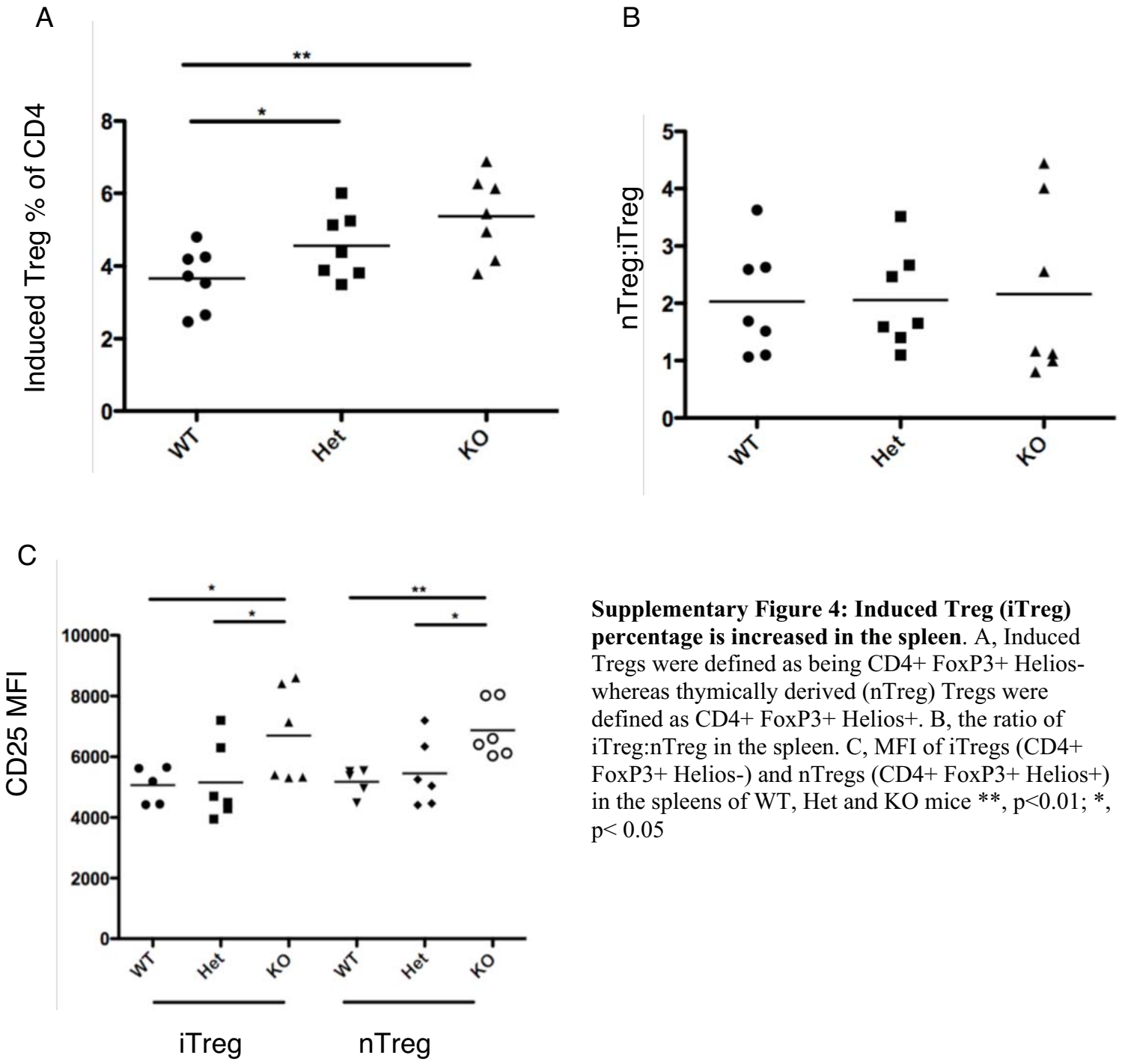
Supplementary Figure 1: CD122 expression on Tregs from PTPN22 deficient mice. A, Thymic Tregs and Treg precursors were stained for CD122, WT (solid curve) and KO (open curve) mice were overlayed (left panels). The right panel shows MFI of CD122 for each genotype. B, thymic Treg precursors stained for CD122. Left panel shows WT (solid) and KO (open) overlay and right panel shows MFI for each genotype. C Splenic Tregs stained for CD122. Left panel shows WT (solid) and KO (open) overlay and right panel shows MFI for each genotype. This figure is representative of at least 2 independent experiments.



Supplementary Figure 2: GITR and CTLA4 expression is shows does not correlate with PTPN22 deficiency. A Tregs from the spleen of WT (solid curve) and KO (open curve) mice were stained for GITR and CTLA-4. B Tregs (left panels) and Treg precursors (right panels) from the thymus of WT (solid) and KO mice (open) were stained for GITR and CTLA-4 expression and overlayed. Results are representative of 2 independent experiments (n=6 mice per group)



Supplementary data 3: PTPN22 expression is higher in FoxP3 –ve CD4 T cells compared to Tregs. $CD4^+$ Teff ($CD4^+$ $CD8^-$ GFP^-) and Treg ($CD4^+$ $CD8^-$ GFP^+) from the spleen of B6 mice expressing EGFP under the control of the mouse *Foxp3* promoter were FACS sorted. Relative expression levels of PTPN22 were measured in each cell subpopulation by qPCR. Graphs show relative fold expression of PTPN22 with 95% confidence intervals shown. Each graph is representative of 3 experiments using 3 littermate mice



Supplementary Figure 4: Induced Treg (iTreg) percentage is increased in the spleen. A, Induced Tregs were defined as being CD4+ FoxP3+ Helios- whereas thymically derived (nTreg) Tregs were defined as CD4+ FoxP3+ Helios+. B, the ratio of iTreg:nTreg in the spleen. C, MFI of iTregs (CD4+ FoxP3+ Helios-) and nTregs (CD4+ FoxP3+ Helios+) in the spleens of WT, Het and KO mice **, $p<0.01$; *, $p< 0.05$