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IL-10 signaling in dendritic cells is required for tolerance induction in a murine model of allergic airway inflammation



Suppl. Figure 1: T cell specific deletion of IL-10Rα and IL-10 signaling in IL-10R<sup>FL/FL</sup>CD4-

T cell specific deletion of IL-10R $\alpha$  and IL-10 signaling in IL-10R<sup>FL/FL</sup>CD4-Cre\* mice (A) PCR analysis for IL-10R $\alpha$  from DNA of sorted T cells (CD3<sup>+</sup>) and B cells (CD19<sup>+</sup>) of IL-10R<sup>FL/FL</sup>CD4-Cre\* mice. Intact IL-10R $\alpha$  results in a PCR product of 373 bp length. One exemplary experiment of four with 1-2 mice is shown. (B) Flow cytometric analysis of STAT3 phosphorylation upon *in vitro* IL-10 stimulation in CD45<sup>+</sup> cells, T cells (CD4<sup>+</sup>), B cells (B220<sup>+</sup>), macrophages (F4/80<sup>+</sup>), DCs (CD11c<sup>+</sup>) and neutrophils (Ly66<sup>+</sup>) from spleens of IL-10R<sup>FL/FL</sup> CD4-Cre\* mice and Cre<sup>-</sup> littermates. Data of 6 mice per group are shown as mean+SD.



Suppl. Figure 2: B cell specific deletion of IL-10R $\alpha$  and IL-10 signaling in IL-10RFL/FLCD19-

**B** cell specific deletion of IL-10Rα and IL-10 signaling in IL-10R<sup>FL/FL</sup>CD19-Cre<sup>+</sup> mice (A) PCR analysis for IL-10Rα from DNA of sorted T cells (CD3<sup>+</sup>) and B cells (CD19<sup>+</sup>) of IL-10R<sup>FL/FL</sup>CD19-Cre<sup>+</sup> mice. Intact IL-10Rα results in a PCR product of 373 bp length. One exemplary experiment of four with 1-2 mice is shown. (**B**) Flow cytometric analysis of STAT3 phosphorylation upon *in vitro* IL-10 stimulation in CD45<sup>+</sup> cells, T cells (CD4<sup>+</sup>), B cells (B220<sup>+</sup>), macrophages (F4/80<sup>+</sup>), DCs (CD11c<sup>+</sup>) and neutrophils (Ly66<sup>+</sup>) from spleens of IL-10R<sup>FL/FL</sup> CD19-Cre<sup>+</sup> mice and Cre<sup>-</sup> littermates. Data of 4-6 mice per group are shown as mean+SD.



Suppl. Figure 3: L10Rα-deficiency and IL-10 signaling in IL10R<sup>FL/FL</sup>CD11c-Cre<sup>+</sup> mice (A) PCR analysis for IL-10Rα from DNA of sorted DCs (CD11c<sup>+</sup>MHCII<sup>+</sup>) and T and B cells (CD3<sup>+</sup> and CD19<sup>+</sup> cells) of IL-10R<sup>FL/FL</sup>CD11c-Cre<sup>+</sup> mice. Intact IL-10Rα results in a PCR product of 373 bp length. One exemplary experiment of two with 3 mice is shown (B) Flow cytometric analysis of STAT3 phosphorylation upon *in vitro* IL-10 stimulation in DCs (CD11c<sup>+</sup>), neutrophils (Ly6G<sup>+</sup>), macrophages (F4/80<sup>+</sup>), CD45<sup>+</sup> cells, T cells (CD4<sup>+</sup>) and B cells (B220<sup>+</sup>) from spleens of IL-10R<sup>FL/FL</sup> CD11c-Cre<sup>+</sup> mice and Cre<sup>-</sup> littermates. Data of n=6-13 mice/group are shown as mean+SD.



Suppl. Figure 4: Lack of IL-10 signaling in IL-10R<sup>FL/FL</sup>Vav-Cre<sup>+</sup> mice Flow cytometric analysis of STAT3 phosphorylation upon *in vitro* IL-10 stimulation in CD45<sup>+</sup> cells, T cells (CD4<sup>+</sup>), B cells (B220<sup>+</sup>), macrophages (F4/80<sup>+</sup>), DCs (CD11c<sup>+</sup>) and neutrophils (Ly66<sup>+</sup>) from spleens of IL-10R<sup>FL/FL</sup> Vav-Cre<sup>+</sup> mice and Cre<sup>-</sup> littermates. Data of 4-7 mice per group are shown as mean+SD.



Suppl. Figure 5: IL-10Rα expression of immune cells

IL-10Rd expression on mifferent immune cells from lung, lymph node and spleen of naïve mice was analyzed by flow cytometry. (A) Representative spleen of naïve mice was analyzed by flow cytometry. (A) Representative histograms of IL-10Rα staining (black line) compared to isotype control (grey) in DCs (CD11c<sup>high</sup>), macrophages (F4/80°), eosinophils (SiglecF<sup>high</sup>), neutrophils (Ly6G<sup>high</sup>), B cells (CD19<sup>+</sup>), CD4<sup>+</sup> T cells, CD4<sup>+</sup>CD25<sup>+</sup> T cells and CD8<sup>+</sup> T cells from lung tissue. (B) Percentage of IL-10Rα<sup>+</sup> cells of the indicated populations from axillary lymph nodes (LN), spleen and lung (upper panel) and corresponding mean fluorescence intensity (MFI) of IL-10Rα staining (lower panel). Pooled data (n=6 mice/group and experiment; mean+SEM, Mann-Whitney U test) of 3 independent experiments are shown. \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### **Gating Strategy** pStat3 Staining



## Suppl. Figure 6: Gating strategy for pStat3 staining Gating strategy used for flow cytometric analysis of STAT3 phosphorylation upon in vitro IL-10 stimulation of spleen cells

### Gating Strategy IL-10R Staining Example Lung



Suppl. Figure 7: Gating strategy for IL-10R staining

Gating strategy used for flow cytometric analysis of IL-10R $\alpha$  expression on different immune cells. One representative lung cell sample is shown.