

## **Additional Information**

### **Interleukin-10 regulates progenitor differentiation and modulates neurogenesis on adult brain**

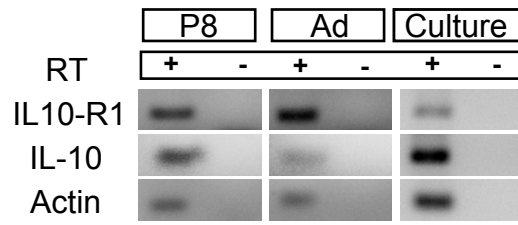
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**Running title:** IL-10 regulates adult neurogenesis

**Content:** 5 Supplementary Figures and associated Legends

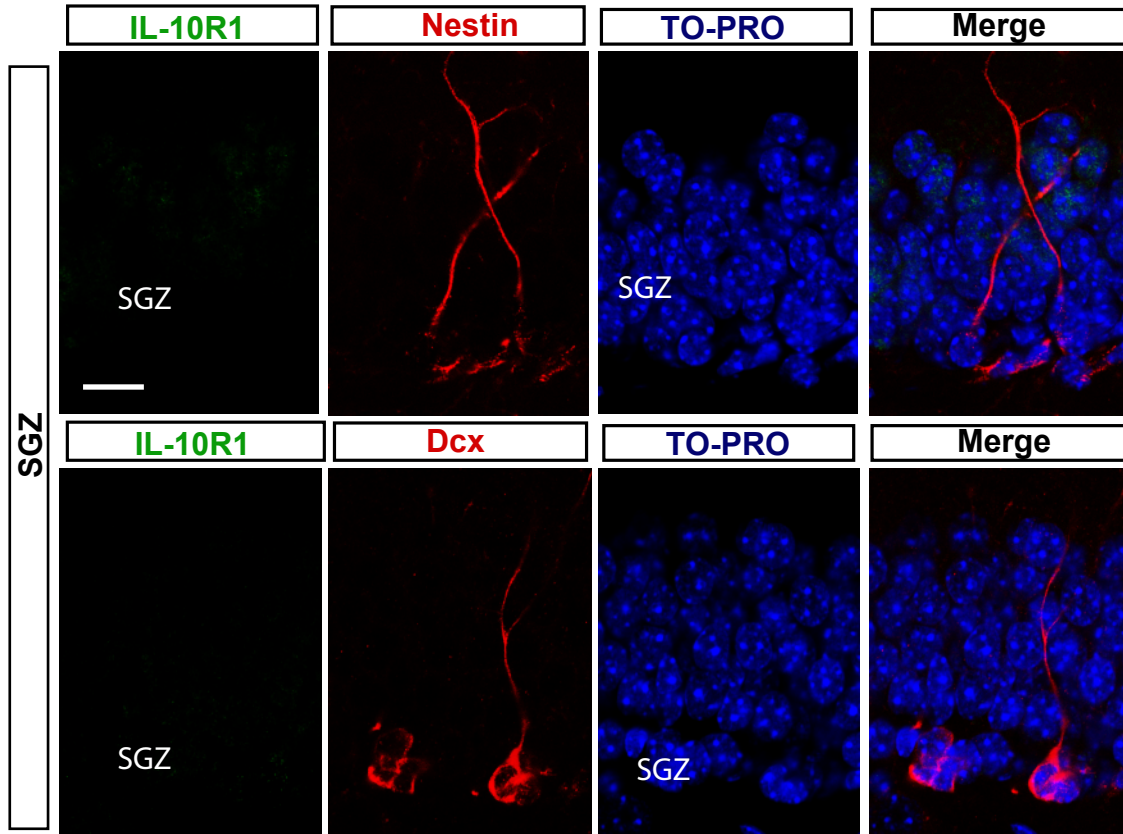
# Supplementary Fig. 1

**A**



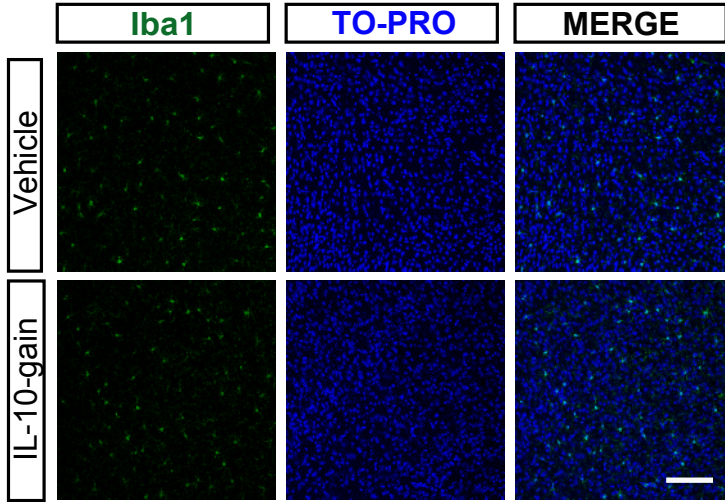
# Supplementary Fig. 2

**A**

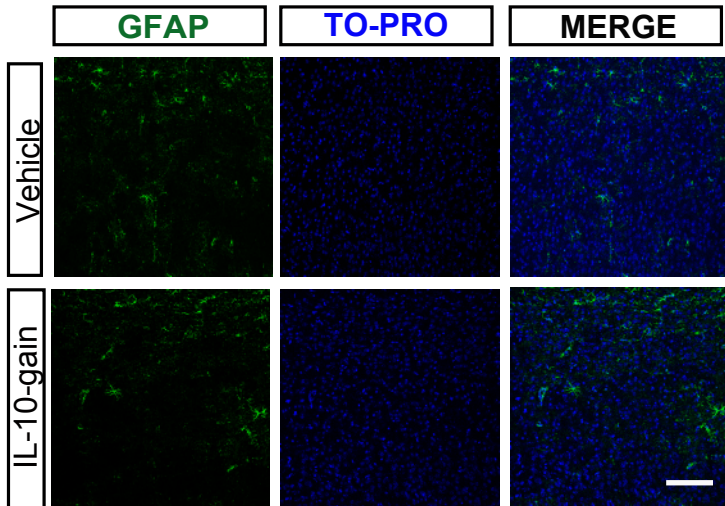


# Supplementary Fig. 3

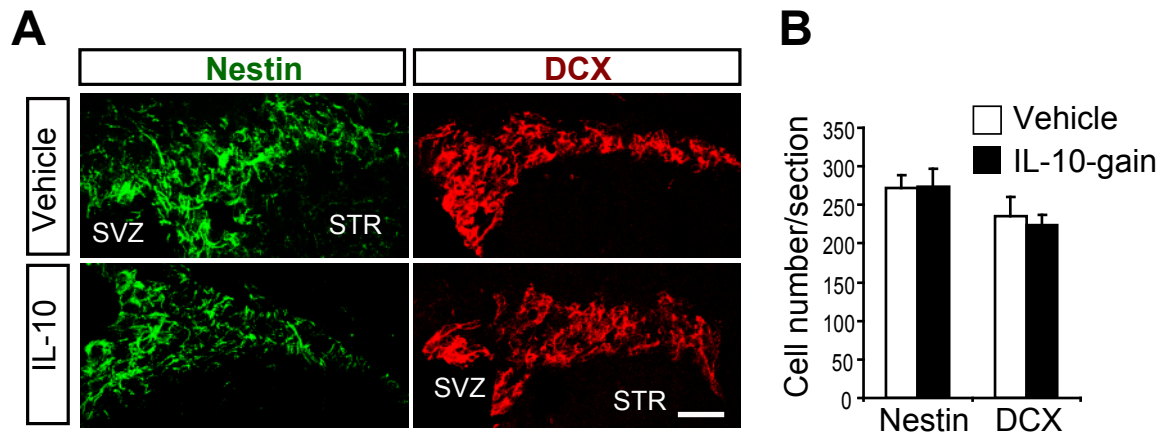
**A**



**B**

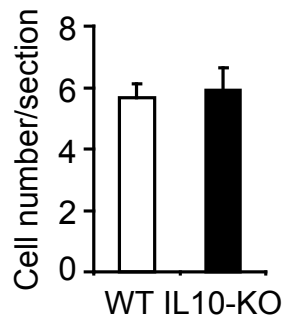


# Supplementary Fig. 4

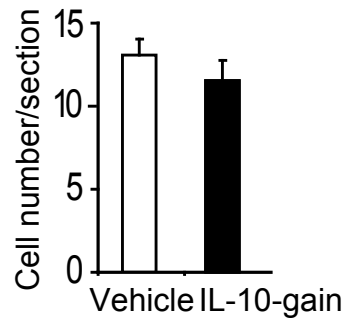


## Supplementary Fig. 5

**A**



**B**



## **FIGURE LEGENDS TO SUPPLEMENTARY DATA**

### **Supplementary Fig. 1. Messenger detection of IL-10 and its receptor in postnatal cells.**

**(A)** RT-PCR showing the presence of IL-10 and IL-10 receptor (IL-10R1) in SVZ tissue samples from postnatal and adult brain, and in primary culture of this area. Actin was used as a control gene in all samples.

### **Supplementary Fig. 2. Expression of IL-10 receptor in adult SGZ**

**(A)** Nestin<sup>+</sup> progenitors (red) and DCX<sup>+</sup> neuroblasts localized in the infragranular layer of the dentate gyrus were IL-10R1 negative (green). TO-PRO (blue) labeled all nuclei. Scale bars: 50  $\mu$ m.

### **Supplementary Fig. 3. Glial reactive markers were similar between IL-10 gain and control animals**

Pictures show the expression in **(A)** of GFAP (green) and in **(B)** of IBA1 (green) in the adjacent cortex of the adult SVZ. The expression of both glial reactivity markers was similar between control and IL-10-gain mice. TO-PRO (blue) labeled all nuclei. Scale bars: 75  $\mu$ m.

### **Supplementary Fig. 4. Neurogenesis impairment induced by IL-10 on adult dorsal SVZ is reversed after cytokine withdraw**

**(A)** Pictures show the presence of Nestin<sup>+</sup> (green) and DCX<sup>+</sup> (red) cells in long waiting animals: 12 waiting days after 7d of IL-10 treatment. The numbers of

both Nestin+ and DCX+ cells recovered when IL-10 treatment was stopped during 12 days.

**(B)** Graphs showing the number of Nestin+ and DCX+ cells per section in long waiting animals. The presence of both markers was similar between control and previously IL-10 treated animals (n=5).

Scale bar 100  $\mu$ m. Data are represented as mean  $\pm$  s.e.m.

**Supplementary Fig. 5. IL-10 does not alter self-renewal in vivo in adult SVZ**

**(A)** Histogram summarizes the number of LCR+ cells per section detected in adult SVZ of IL-10-gain animals.

**(B)** Histogram summarizes the number of LCR+ cells per section detected in adult SVZ of WT and IL-KO animals.