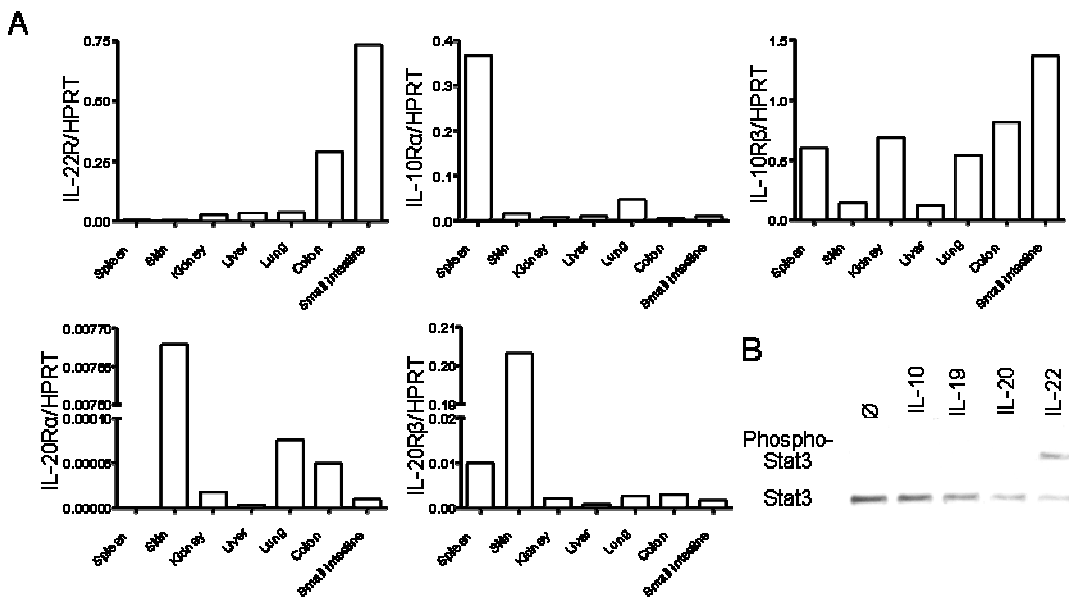


## Supplemental Data

### Innate and Adaptive Interleukin-22 Protects Mice

#### from Inflammatory Bowel Disease

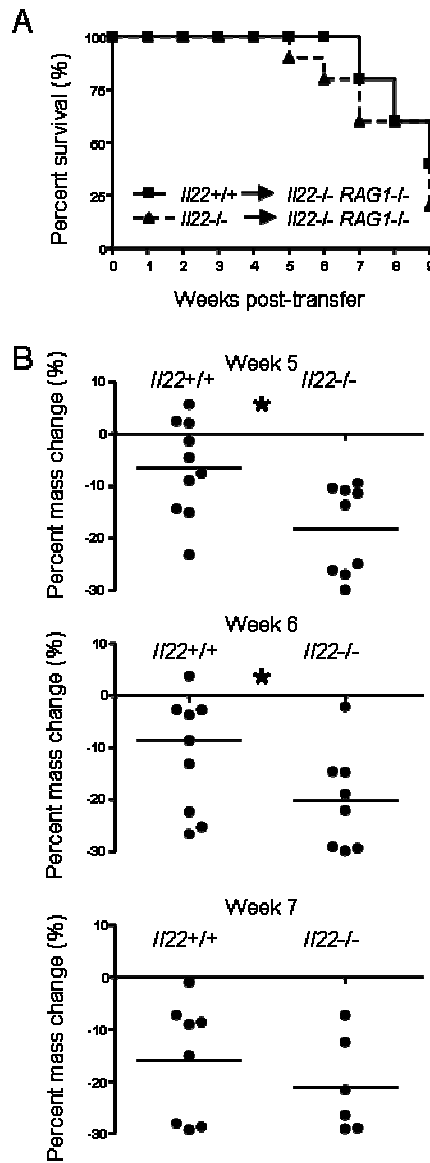
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**Figure S1. IL-22R is expressed highly in the gastrointestinal tract**

(A) IL-10 family receptor mRNA expression by real-time RT-PCR in the indicated mouse tissues. Bars represent the mean expression of the cytokine gene to HPRT using the  $\Delta\Delta C_T$  method. Experiment was performed two times with similar results.

(B) Human colonic epithelial cells are responsive to IL-22. Caco-2 cells were stimulated for 20 min with 100  $\mu$ g/ml recombinant human IL-10, IL-19, IL-20, IL-22 or remained unstimulated ( $\emptyset$ ). Phosphorylation or total Stat3 in the cell lysates was determined by immunoblotting with the respective antibodies. Experiment was performed three times with similar results.

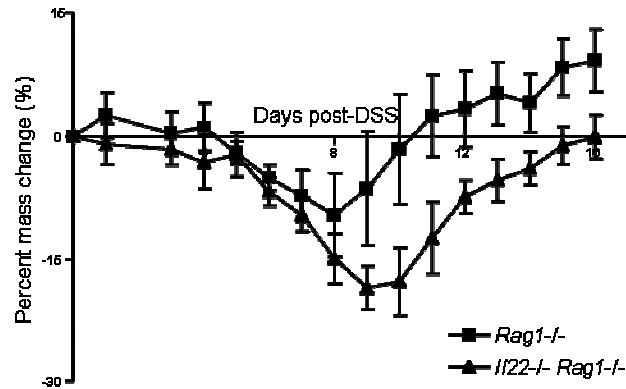


**Figure S2. Kinetics of IBD at later time points**

*Il22* <sup>+/+</sup> or *Il22* <sup>-/-</sup> CD4<sup>+</sup> CD45RB<sup>hi</sup> CD25<sup>-</sup> NK1.1<sup>-</sup> T cells (5x10<sup>5</sup>) were transferred i.p. into *Il22* <sup>-/-</sup> *Rag1* <sup>-/-</sup> double deficient mice. (10 mice per group.)

(A) Percent survival of the mice. Mice were euthanized according to protocol when they reached -30% mass loss.

(B) Mice were massed weekly and percent change from week 0 was calculated. Each dot represents one mouse, bar indicates mean. \* indicates *p*<0.05.



**Figure S3. Exacerbated colitis in IL-22 deficient mice is independent of T cells**

*Rag1*<sup>-/-</sup> or *Il22*<sup>-/-</sup> *Rag1*<sup>-/-</sup> mice were given 3% DSS ad libitum in their drinking water for seven days. Mice were massed daily and percent mass change from day 0 was calculated. Mean±SD. 10 mice/group.