

Figure 2S

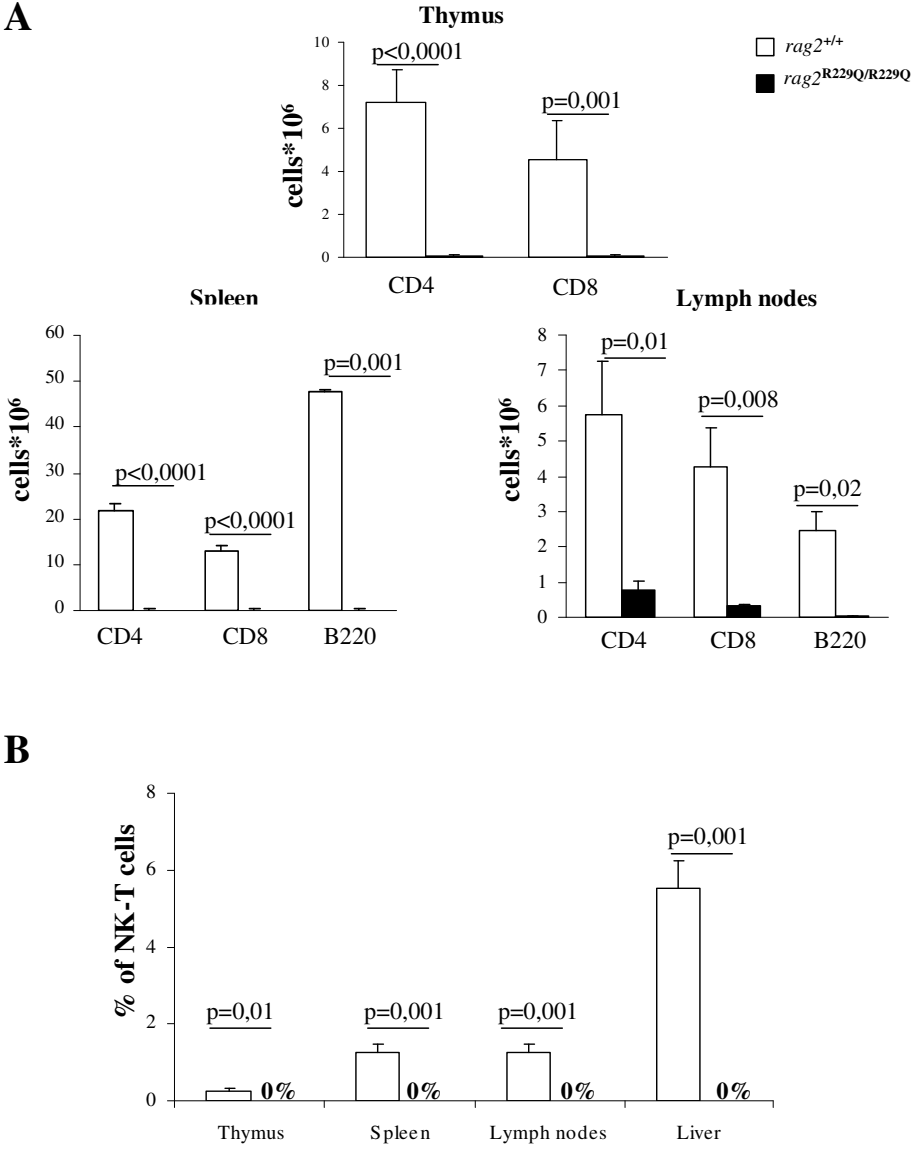
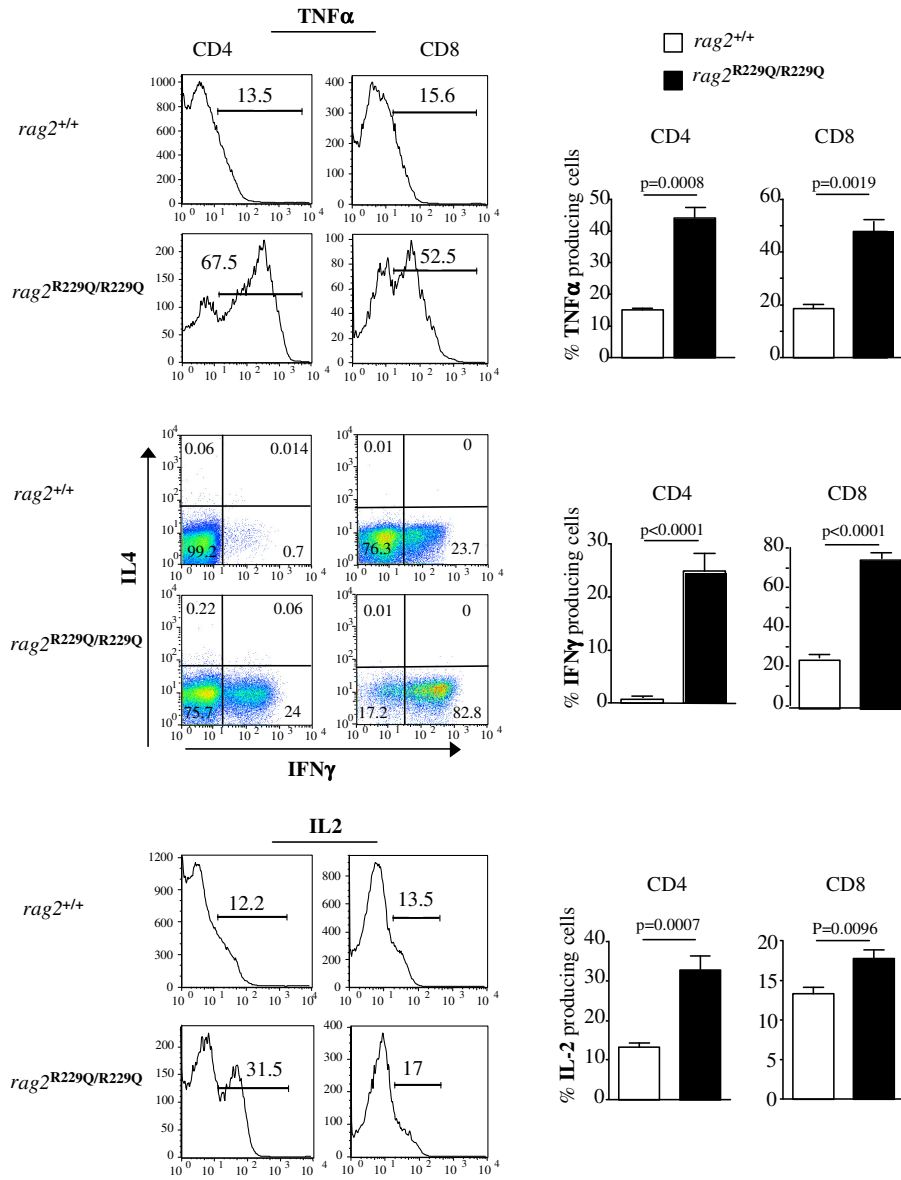


Figure 3S



**Supplementary figure 1.** EGFP expression in electronically gated DN, DP and SP thymocytes from *rag2*<sup>+/+</sup> (shaded histograms) and *rag2*<sup>R229Q/R229Q</sup> (black line) mice.

**Supplementary figure 2.** (A) Relative representation + standard deviation (SD) of the absolute number of CD4<sup>+</sup>, CD8<sup>+</sup> cells in thymus and CD4<sup>+</sup>, CD8<sup>+</sup> and B220<sup>+</sup> cells in spleen and lymph nodes of *rag2*<sup>+/+</sup> (white bars) and *rag2*<sup>R229Q/R229Q</sup> mice (black bars).

(B) Representation of NK-T cells (defined as CD3<sup>+</sup>CD1d tetramer<sup>+</sup>) percentage in thymus, spleen, lymph nodes and liver from four *rag2*<sup>+/+</sup> and four *rag2*<sup>R229Q/R229Q</sup>. White bars indicate *rag2*<sup>+/+</sup> mice while, the percentage of NK-T cells in *rag2*<sup>R229Q/R229Q</sup> mice is 0%.

**Supplementary figure 3. Enhanced cytokine production by *rag2*<sup>R229Q/R229Q</sup> T cells.** Representative FACS histograms or dot plot analyses are shown on the left hand side with the corresponding statistical analyses with mean percentages + SD of TNF $\alpha$ , IFN $\gamma$  and IL-2 secreting cells of at least 4 samples on the right.