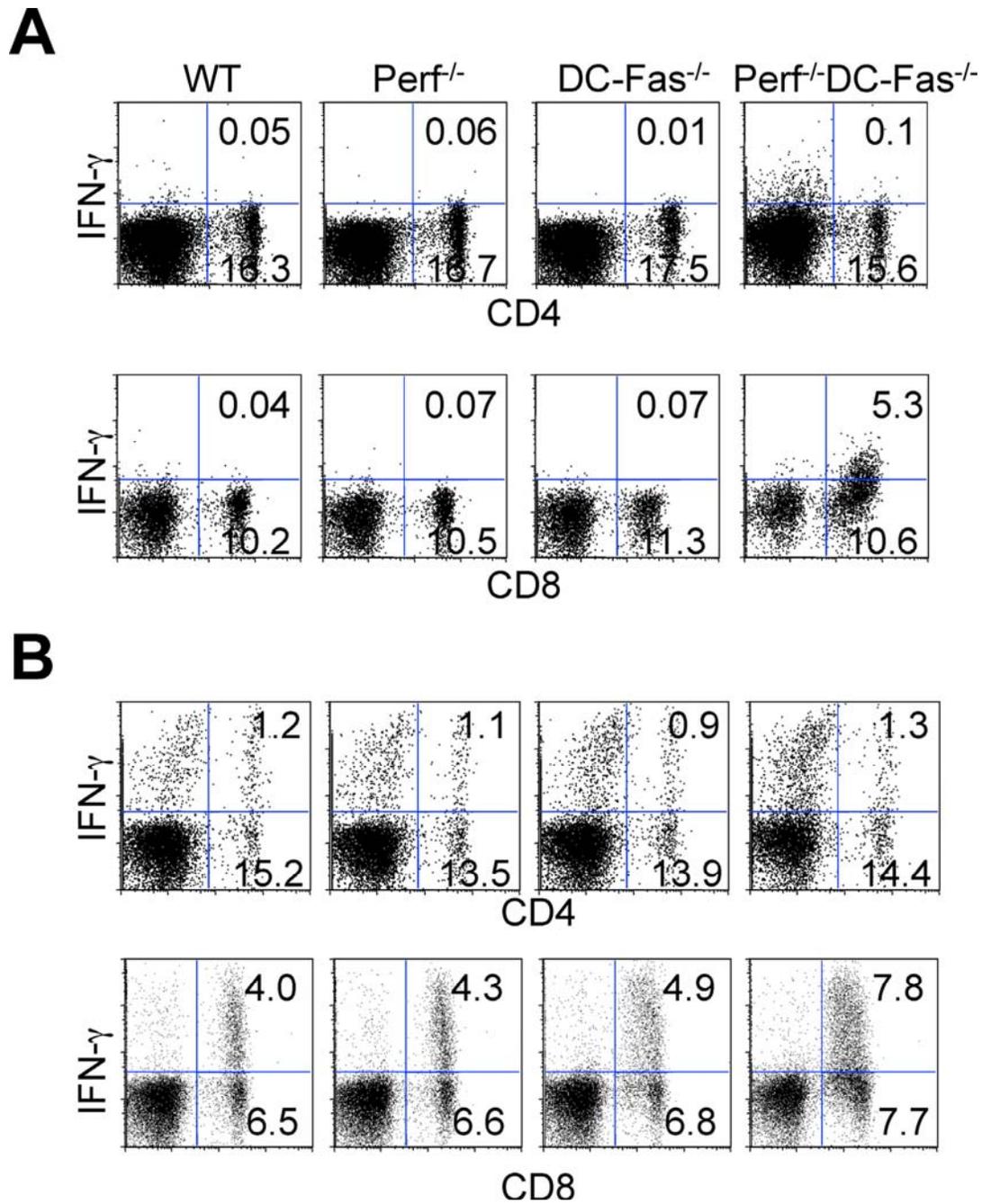
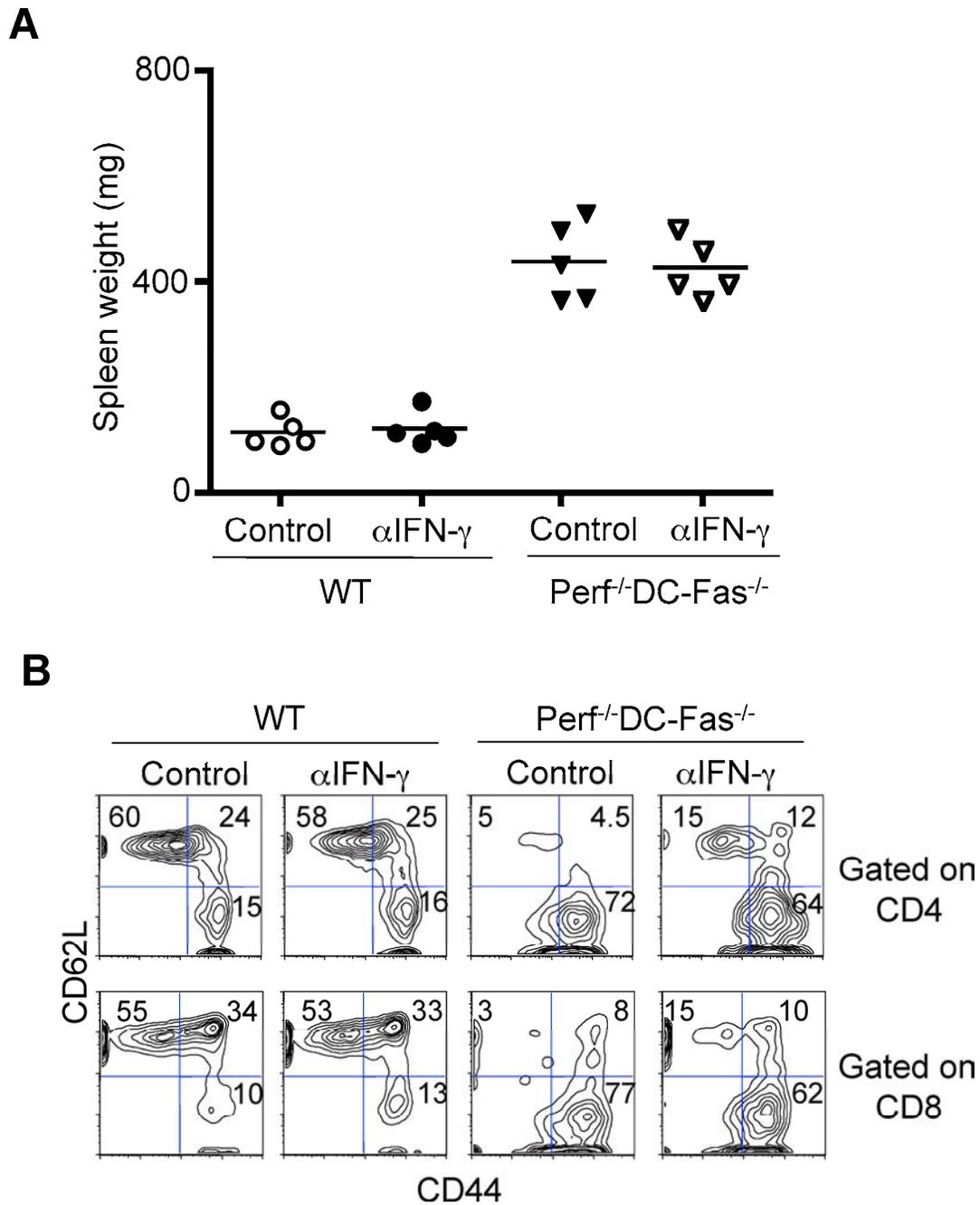


**Figure S1. Expression of Fas on lymphocytes and DCs from perforin<sup>-/-</sup> DC-Fas<sup>-/-</sup> and control mice**

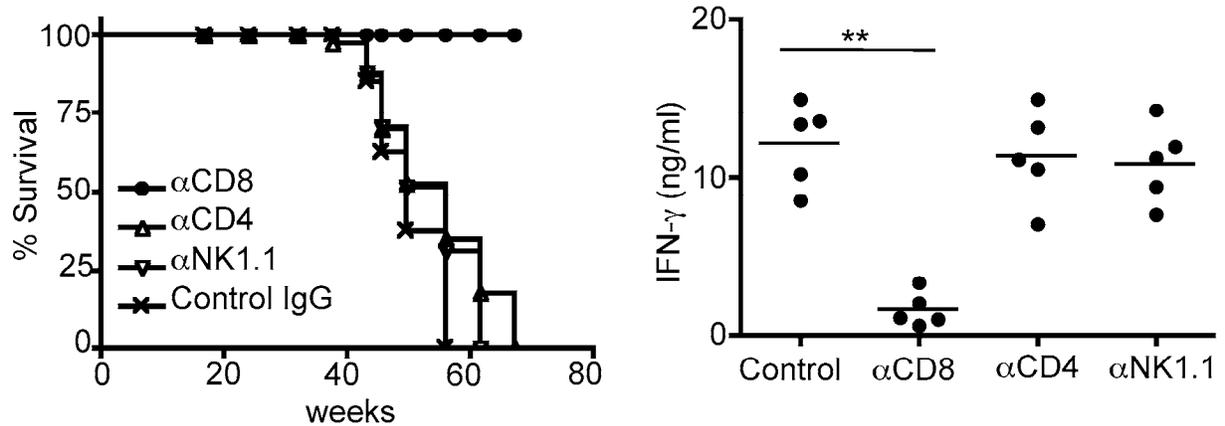
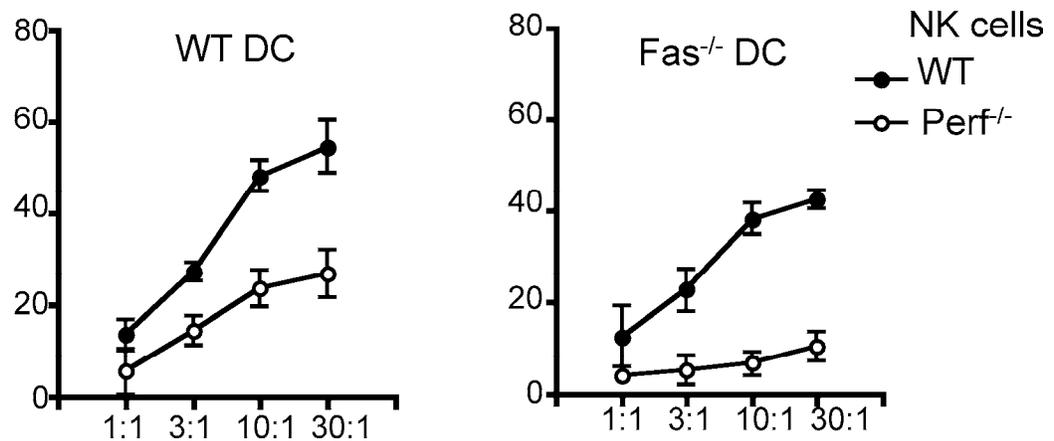
Splenocytes from 4-week-old WT, perforin<sup>-/-</sup>, DC-Fas<sup>-/-</sup>, and perforin<sup>-/-</sup> DC-Fas<sup>-/-</sup> mice were stained with APC-conjugated antibodies to CD4, CD8, or CD11c, followed by staining with PE-anti-Fas. Bone marrow derived DCs (BMDC) were also stained with PE-anti-Fas. The cells were analyzed by flow cytometry and Fas staining on different cell types was plotted.



**Figure S2. IFN- $\gamma$  production by CD8<sup>+</sup> T cells in perf<sup>-/-</sup>DC-Fas<sup>-/-</sup> mice**  
 (A) Splenocytes from 4-week-old perf<sup>-/-</sup>DC-Fas<sup>-/-</sup> mice were stained with APC-anti-CD4 and Cychrome-anti-CD8, followed by intracellular staining with PE-anti-IFN- $\gamma$ . (B) Splenocytes were stimulated with 1  $\mu$ g/ml anti-CD3 and anti-CD28 in the presence of brefeldin A for 5 h. The cells were stained as in (A).



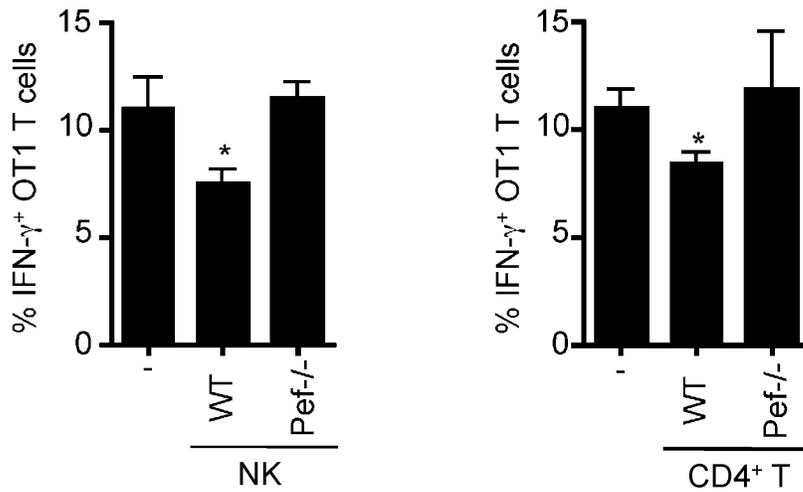
**Figure S3. Analyses of Perf<sup>-/-</sup>DC-Fas<sup>-/-</sup> mice with anti-IFN- $\gamma$  treatment**  
 (A) Spleen weight of 7-week-old wild type or Perf<sup>-/-</sup>DC-Fas<sup>-/-</sup> mice treated as in Fig. 7.  
 (B) Flow cytometry for CD44 versus CD62L on splenocytes of mice in (A).

**A****B**

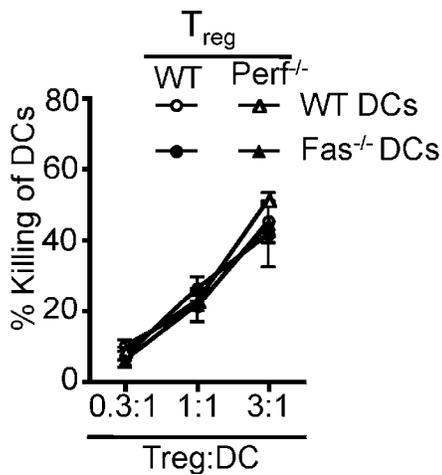
**Figure S4. Effect of depletion of T cells or NK cells in *Perf<sup>-/-</sup>* DC-*Fas<sup>-/-</sup>* mice and the killing of DCs by NK cells**

(A) *Perf<sup>-/-</sup>* DC-*Fas<sup>-/-</sup>* mice were injected with antibodies to CD8 (53-6.7), CD4 (GK1.5), NK1.1 (PK136), or control IgG from 3 weeks to 10 weeks of age or until mouse died (100 μg/mouse, I.P. every 3 days). The percentages of survival of the mice were plotted. IFN-γ in the sera of these mice at 6 weeks of age was measured. \*\*P<0.01. (B) Wild type or perforin<sup>-/-</sup> NK cells were cultured in 1000 U/ml IL-2 for 6 days. Killing of wild type or *Fas<sup>-/-</sup>* DCs by NK cells was determined.

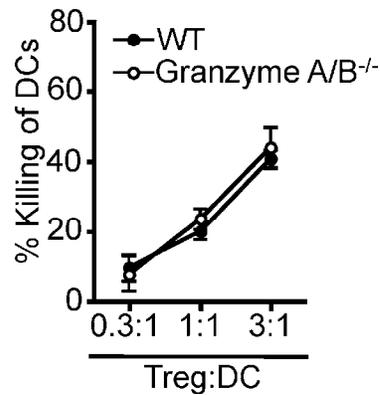
A



B



C



**Figure S5. Effects of perforin deficiency in NK cells and T-cell subsets**

(A) Wild type or perforin<sup>-/-</sup> NK cells were cultured with 1,000 U/ml IL-2 for 5 days. Perforin<sup>-/-</sup> OT1 T cells and antigen-pulsed Fas<sup>-/-</sup> DCs were transferred into recipient mice, together with wild type or perforin<sup>-/-</sup> NK cells (left panel). Fas<sup>-/-</sup> DCs were also pulsed with OVA<sub>SIINFEKL</sub> and OVA<sub>323-339</sub> peptides. Perforin<sup>-/-</sup> OT1 T cells were transferred into recipient with antigen-pulsed Fas<sup>-/-</sup> DCs, together with wild type or perforin<sup>-/-</sup> OT2 T cells (right panel). IFN- $\gamma$  staining in transferred OT1 T cells were analyzed three days later. \**P*<0.05. (B) Killing of wild type or Fas<sup>-/-</sup> DCs by wild type or perforin<sup>-/-</sup> T<sub>reg</sub> cells. (C) Killing of DCs by wild type or granzyme A/B<sup>-/-</sup> T<sub>reg</sub> cells.