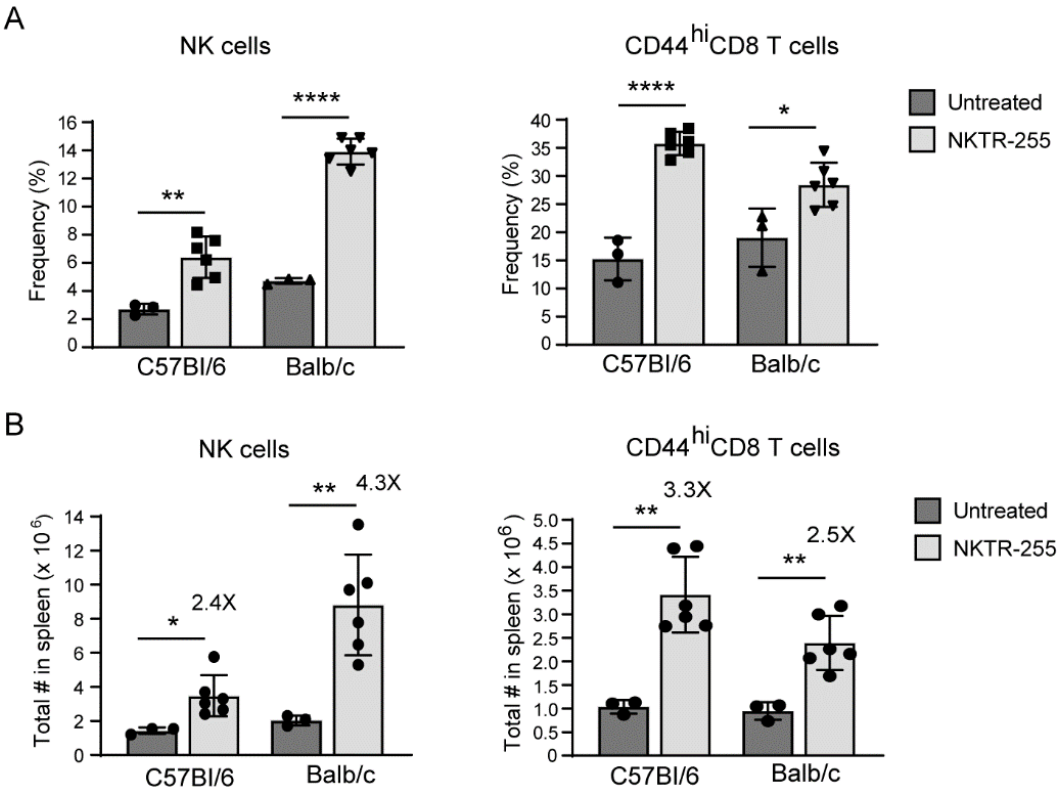
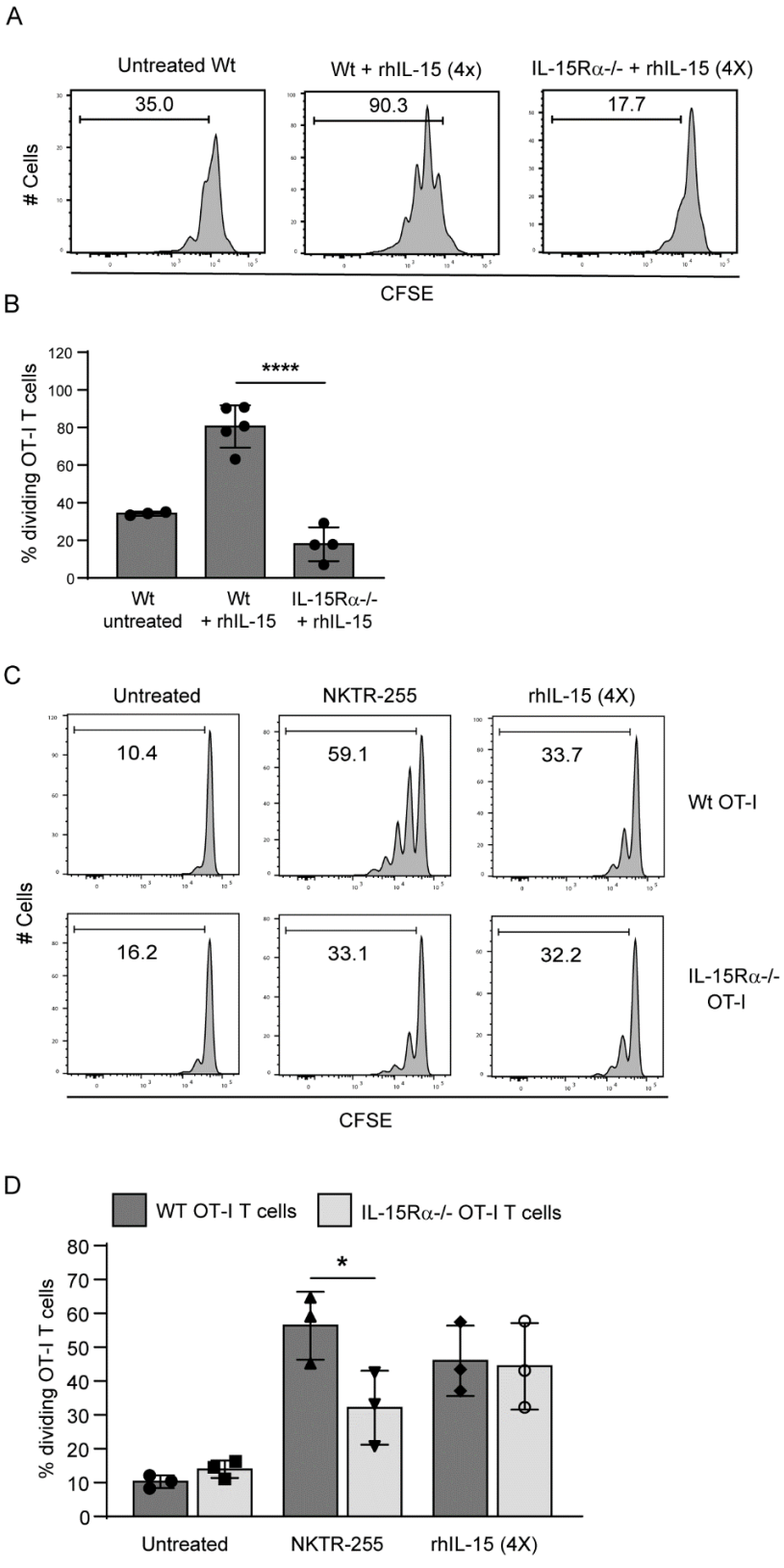
Supplemental Figures



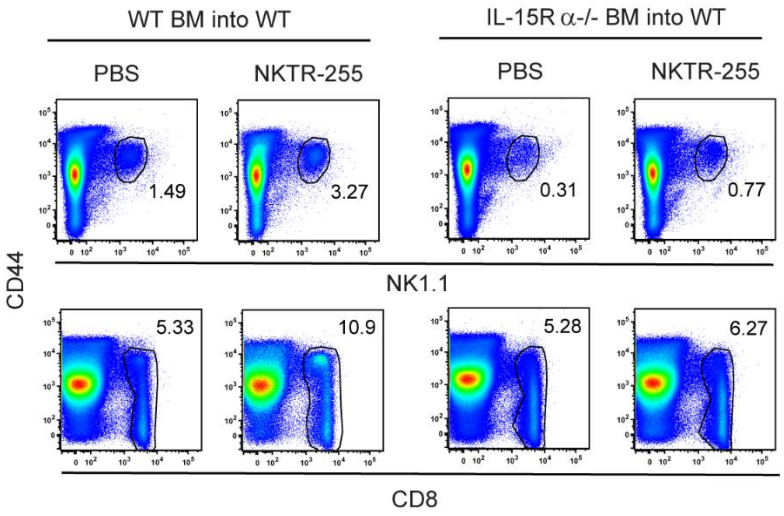
Supplemental Figure 1. Responses to NKTR-255 in C57Bl/6 and Balb/c mice. Age-matched female C57Bl/6 and Balb/c mice (n=3-6 mice/group) were treated with NKTR-255 (0.03 mg/kg, i.p.) or untreated, and lymphocyte populations in spleen were examined 6 days later. (**A**) Average frequency of splenic NK cells (NKp46+) and CD44^{hi} CD8 T cells. (**B**) Total number of indicated cell populations in spleens. Numbers above bars represent relative fold increase in treated over untreated mice. Data are compiled from two experiments. *P < 0.05; **P <0.01; ****P < 0.0001, (calculated using the two-tailed Student's t test).

Supplemental Figure 2



Supplemental Figure 2. IL-15Rα$^{-/-}$ and WT OT-I T cell response to NKTR-255 and rhIL-15. (**A, B**) Naive OT-I cells from WT (CD45.1^{+}) mice were CFSE-labeled and transferred into CD45.2^{+} WT and IL-15Rα$^{-/-}$ mice. One day later, mice (n=3–5 mice/group) were treated i.p. with four doses of rhIL-15 (5.0 μg, every 2 days). Ten days post-treatment, CFSE dilution in CD45.1^{+} OT-I cells in splenocytes was analyzed. (**A**) Representative CFSE intensity after gating on CD45.1^{+} (WT) donor CD8 T cells. (**B**) Average percent of dividing OT-I cells from two experiments. **(C, D)** Naive OT-I cells from WT (CD45.1^{+}) and IL-15Rα$^{-/-}$ (CD45.1/CD45.2^{+}) mice were mixed at a 1:1 ratio, CFSE-labeled, and transferred into CD45.2^{+} WT mice. One day later, mice (n=3 mice/group) were treated i.p. with either one dose of NKTR-255 (0.03 mg/kg) or four doses of rhIL-15 (5.0 μg, every 2 days). Nine days post-treatment, CFSE dilution in CD45.1^{+} OT-I T cells in splenocytes was analyzed. (**C**) Representative CFSE intensity after gating on CD45.1^{+} (WT) and CD45.1/CD45.2^{+} (IL-15Rα$^{-/-}$) donor CD8 T cells isolated from the same mouse. (**D**) Average percent of dividing OT-I cells in one representative experiment. Similar results were obtained in two additional experiments. *P < 0.05; ****P < 0.0001, (calculated using the two-tailed Student's t test); OT-I, ovalbumin-specific CD8 T cells; rhIL-15Rα, recombinant human IL-15Rα.

Supplemental Figure 3



Supplemental Figure 3. Frequency of NK cells and CD8 T cells in WT and IL-15Rα$^{-/-}$ BM chimeras. Representative flow cytometric plots of splenocytes showing staining of NK1.1, CD8, and CD44 expression in PBS and NKTR-255-treated BM chimeras from the experiment depicted in Figure 6 (A and B).