Supplemental figure 1. IL7 therapy increases the cellularity in the spleen and lymph nodes. Wild-type mice received daily i.p. injections of either PBS or rhIL7 (10 μg per mouse) for 6 days. Graphical summary of mean absolute number +/- SE of lymph node cells and splenocytes (2 Axillary and 2 inguinal LNs were used for cell count) of mice treated with IL7 or PBS.
Supplemental figure 2. Proliferation of mature CD4+ T cells requires MHCII contact during IL7 therapy. Enriched CD45.1+CD4+ cells from thymuses were labeled with CFSE prior to their transfer into CD45.2+ C57BL/6-MHC+/+ or CD45.2+ C57BL/6-MHC-/- mice. Mice were treated with IL7 for 6 days and at day 7, congenic CD4+ T cells were analyzed for evidence of proliferation. A) Data show histogram plots from lymph nodes. B) Evaluation of pStat5 and BCL-2 in transferred CD4+PERI into MHCII+/+ host and IL7 treatment.
Figure 3. Evaluation of FLT3R on CD4^+ T cells. A) Flt3R was measured by real time PCR on sorted CD4^+ cells. Sorted lineage^- BM cells were used as positive control. Value of FLT3R in CD4^+ cells was expressed as relative expression to BM lineage^- cells. GAPDH was used as internal control. Bone marrow lineage^- (black) and CD4^+ T cells (white). GAPDH was expressed similarly in BM lin^- cells and CD4^+ lymphocytes while FLT3R was undetectable (ND) in CD4^+ T cells. B) Evaluation of FLT3R by indirect flow cytometry staining. Bone marrow lin^- cells were used as positive control.
Supplemental figure 4. Thymic single positive CD8$^+$ T cells (CD8$^+$ SPT) are more sensitive to IL7 therapy than peripheral CD8$^+$ T cells (CD8$^+$ PERI). BCL-2 phosphorylation in CD8$^+$ PERI vs CD8$^+$ SPT exposed to varying concentrations of rhIL7.
Supplemental Figure 5

Supplemental figure 5. Thymic single positive CD4\(^+\) T cells respond to IL7. Stat5p and BCL-2 expression of transferred CD4\(^+\)\(_{SP}\) after PBS (Grey) or IL7 (Black) treatment.
Supplemental figure 6. The proportion of slow vs. brisk proliferating cells is different among CD4^+_{SPT} and CD4^+_{PERI}. CD45.1^+CD4^+_{SPT} and peripheral CD45.1^+CD4^+_{PERI} were enriched from thymus and LN, labeled with CFSE and transferred into Rag^{-/-} mice. Nine days later, cells were recovered and analyzed for evidence of proliferation.