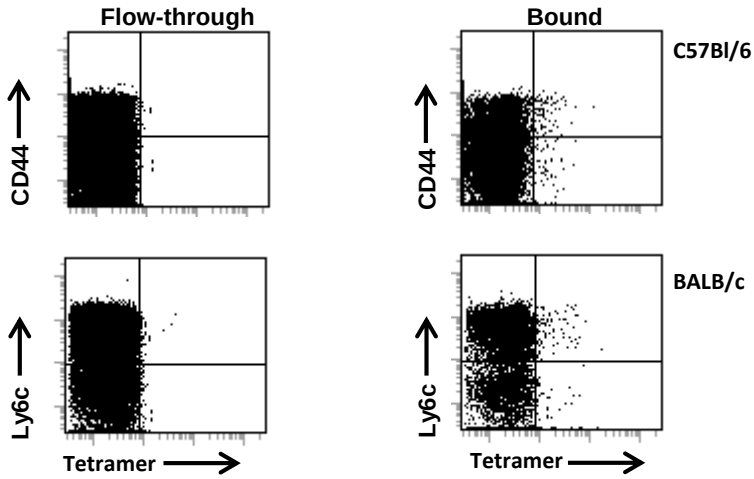
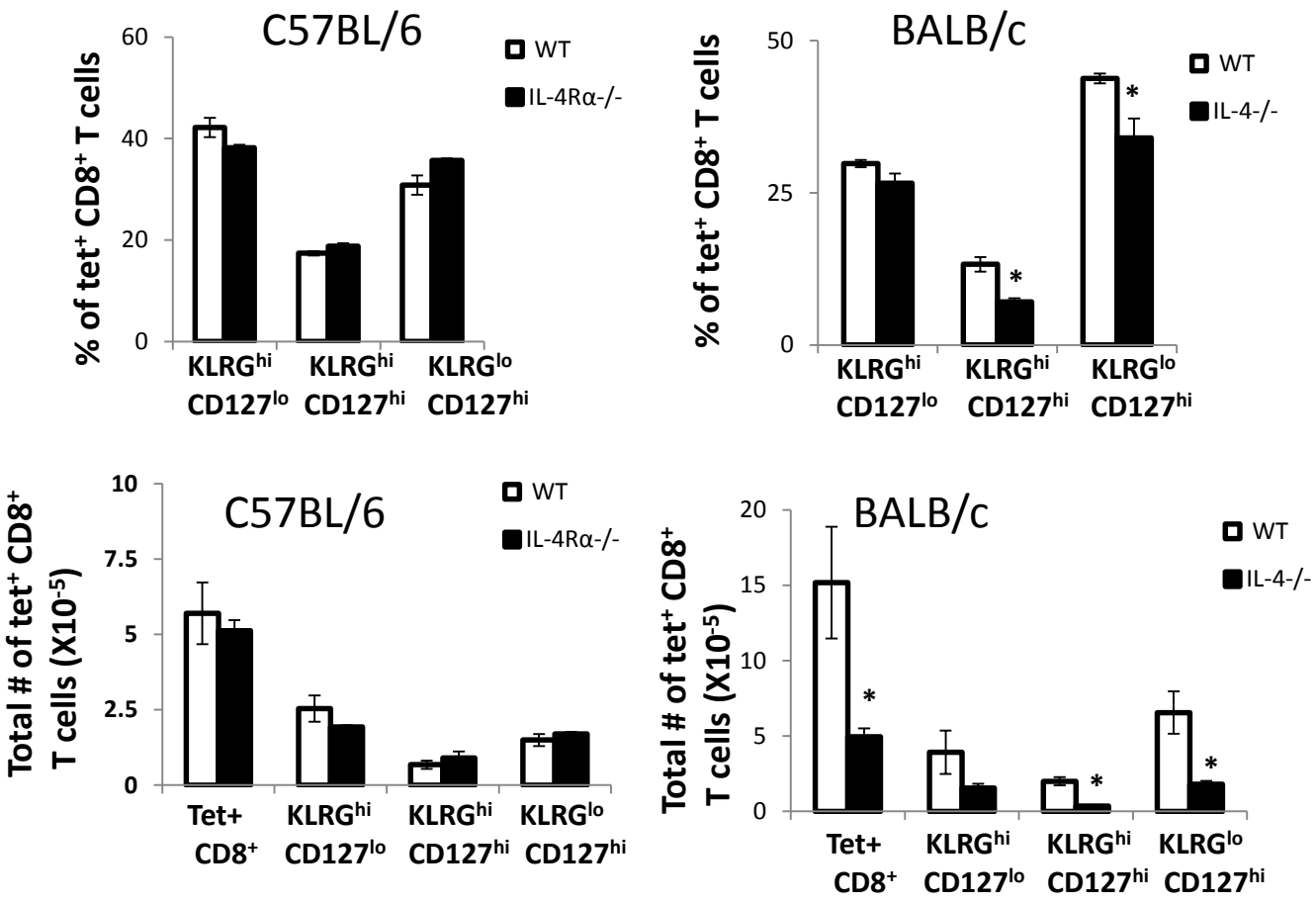
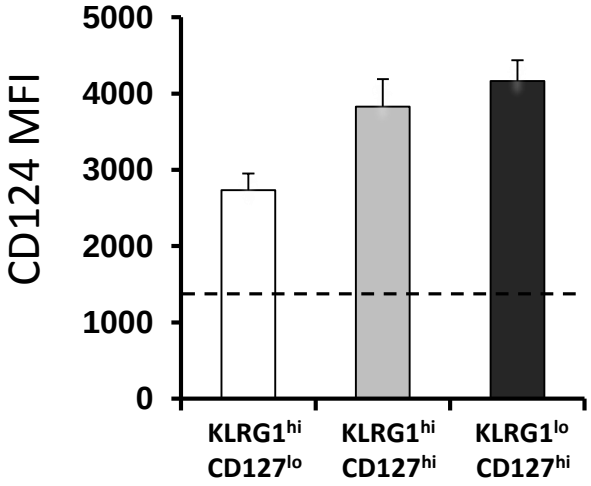


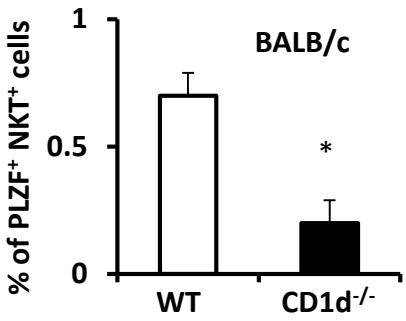
Supplementary Figure 1. Isolation of antigen-specific precursor cells in unimmunized C57BL/6 and BALB/c mice. Groups of BALB/c and C57BL/6 mice (N=5-6/group) were sacrificed and $CD8^+$ T cells were negatively enriched from single spleen cell suspensions with a magnetic column (Miltenyi Biotech), stained with PE-labeled MHC-tetramer and then enriched over an anti-PE column, after which cells were analyzed by flow cytometry. Results show tetramer staining of flow-through versus bound fractions of splenocytes from C57BL/6 and BALB/c mice and the levels of CD44 (BL/6) and Ly6C (BALB/c) on each population.



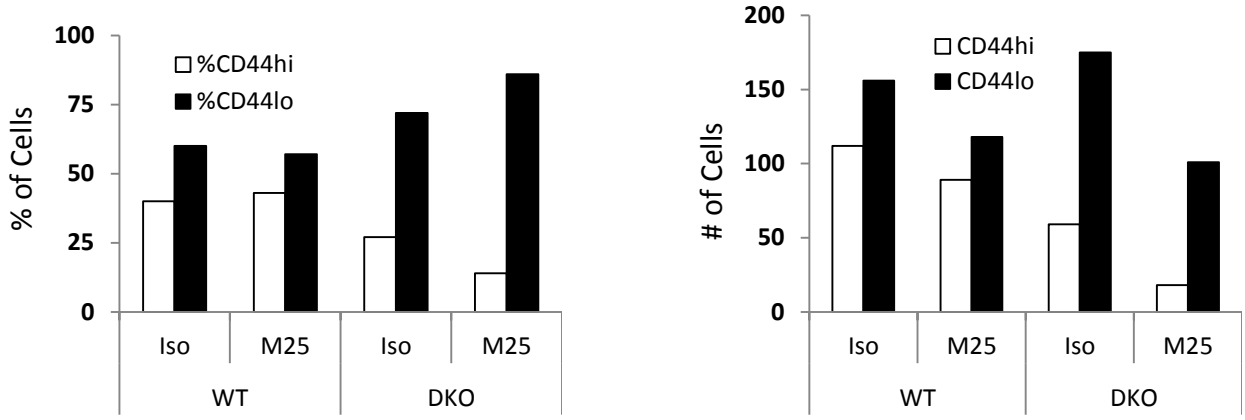
Supplementary Figure 2. IL-4 is critical for effector and pre-memory CD8$^+$ T cells in BALB/c, but not C57BL/6 mice at day 24 after infection. Groups of C57BL/6 wild-type and IL-4R$\alpha^{-/-}$ mice (N=5/group) were infected ip with LCMV and were sacrificed on day 24 after infection. Spleen cells were stained with D^{b}gp33-tetramer along with antibodies against KLRG1 and CD127. Graphs show the frequency (upper left graph) and total numbers (lower left graph) of effector CD8$^+$ T cell subsets. Groups of BALB/c wild-type and IL-4$^{-/-}$ mice were infected i.p. (N = 5) with LCMV and sacrificed on day 24 after infection. Spleen cells were stained with L^{d}np118 tetramers and antibodies against CD8, KLRG1 and CD127. Graphs show the frequency (upper right graph) and total numbers (lower right graph) of effector CD8$^+$ T cell subsets. Results are representative of two independent experiments with similar results.



Supplementary figure 3. CD124 expression on subpopulations of LCMV-specific effector CD8+ T cells. BALB/c wild-type mice (N=4) were infected ip with LCMV and sacrificed ten days later. Spleen cells were stained with L^dnp118-126 tetramer and antibodies against CD8, CD44, KLRG1, CD127, and CD124 and data collected on a LSRII flow cytometer and analyzed using FacsDIVA. Results show the mean fluorescence intensity of CD124 expression on distinct subpopulations of effector cells as shown by the markers indicated on the graph +/- SD. Dashed line indicates CD124 levels on $CD44^{lo}CD62L^{hi}$ cells isolated from the spleen of uninfected BALB/c mice (N=3).



Supplementary figure 4. CD1d$^{-/-}$ mice on a BALB/c background have a reduced frequency of PLZF^{+} thymocytes. Groups of BALB/c wild-type and CD1d$^{-/-}$ mice (N=4 mice/group) were sacrificed and thymocytes were stained for cell membrane CD4, CD8, CD44, and intracellular PLZF. Results show the numbers of PLZF-expressing cells in BALB/c wild-type and CD1d$^{-/-}$ mice. * denotes $p<0.03$, student's t-test.



Supplemental Figure 5. Effect of IL-7 on VM development. Groups of BALB/c WT or IL-4/-15-double deficient mice on a BALB/c background were either treated with MPC11 isotype control antibody or anti-IL-7 antibody (3 mg/mouse) on days 0, 2, 5, 7, 9, 11, 13 and sacrificed on day 14 (N=6-8/group) and single cell suspensions from spleens were generated. Splenocytes were stained with L^dnp118-126 tetramers and subjected to tetramer enrichment as described in materials and methods. Results show the (A) percentage and (B) total number of $CD44^{hi}$ vs $CD44^{lo}$ cells per mouse in the spleen. The efficacy of IL-7 neutralization was verified by assessing the levels of bone marrow pre-B cells (Data not shown).