



Supplemental Figure 1: miR-17-92 deficiency impairs the proliferative capacity and IFN-y production of CD4 T cells (A) Naïve CD4 T cells purified from miR-17-92-/- and control mice were labeled with CFSE, and stimulated with plate-bound anti-CD3 and soluble anti-CD28 for 48 hours. The extent of cell divisions is indicated by CFSE dilution. (B-D) miR-17-92-/- and the respective control mice were infected with LCMV Armstrong. (B,C) Splenocytes were stimulated with GP₆₁₋₈₀ peptide for 5 hours and CD4 T cells were intracellularly stained for IFN-y. IFN-y expression in IFN-γ⁺ CD4 T cells as measured by mean fluorescence intensity (MFI) at the indicated time points post infection. (D) Number of germinal center B cells and LCMV-specific IgG antibody secreting cells (ASCs) per spleen on day 8 p.i. (E-G) miR-17-92 Tg/Tg and the respective control mice were infected with LCMV Armstrong. (E,F) Splenocytes were stimulated with GP₆₁₋₈₀ peptide for 5 hours and CD4 T cells were intracellularly stained for IFN-y. IFN-y expression in IFN-y⁺ CD4 T cells as measured by mean fluorescence intensity (MFI) at the indicated time points post infection. (G) Number of germinal center B cells cells per spleen on day 8 p.i.. Results are representative of at least three independent experiments with n≥3. (H) QRT-PCR analysis of the expression of individual members in the miR-17-92 cluster in naïve, Tfh and Th1 SMARTA cells on day 3 and day 8 p.i.. Bars represent the fold changes relative to naïve. Sno-142 was used as normalization control. Results are representative of two independent experiments.

Supplemental Figure 2



Supplemental Figure 2: The effect of miR-17-92 over-expression on LCMV-specific CD4 T cell expansion and differentiation is cell autonomous. (A) SMARTA cells were transduced with MSCV construct with or without miR-17-92 insert and transferred to C57BL/6 recipients. Over-expression was confirmed by QRT-PCR. On day 8 p.i., splenocytes were collected for analysis. (B) FACS plots of IFN- γ and TNF- α staining (gated on SMARTA cells), the frequency of IFN- γ^+ SMARTA cells, and IFN- γ MFI of IFN- γ^+ SMARTA cells. (C) FACS analysis of phosphorylated ribosome protein S6 in SMARTA cells (day 6 p.i.). Results are representative of at least three independent experiments with n≥3.