

Supplemental Materials

Supplemental Figure S1. Overexpression of dnRAR α in CD8⁺ T cells renders CD8⁺ T cell unresponsive to RA *in vitro*. A. *Cre-dependent overexpression of dnRAR α .* CD4⁺, CD8⁺ T cells and CD19⁺ B cells were purified from dnRAR α and dnRAR α CD4^{Cre} mice, respectively. Real-time PCR was performed to evaluate the mRNA level of dnRAR α accordingly. B. *Non-responsiveness to RA in vitro.* CD8⁺ T cells were purified from dnRAR α or dnRAR α CD4^{Cre} mice, and activated *in vitro* with 10 μ g/ml α -CD3 and 1 μ g/ml α -CD28 in the presence of 10nM RA or DMSO as vehicle control. α 4 β 7 expression was evaluated. Black, dnRAR α CD4^{Cre}+DMSO; Blue, dnRAR α CD4^{Cre}+RA; Dashed gray, dnRAR α +DMSO; Red, dnRAR α +RA. This is representative of 2 experiments with similar results.

Supplemental Figure S2. Deficient CD8⁺ T cell expansion in response to OVA, α -CD40 and pI:C immunization in dnRAR α CD4^{Cre} mice is independent of CD4⁺ T cells. dnRAR α , dnRAR α CD4^{Cre} mice were immunized as in Fig 5 but CD4⁺ T cells were depleted on day -2, 1 and 6. Shown is kinetics of CD44^{hi}OVA tetramer⁺% of CD8⁺ T cells in blood. Data shown is representative of 2 experiments with similar results with n \geq 3 mice/group. Statistically significant differences were determined by 2way ANOVA analysis.