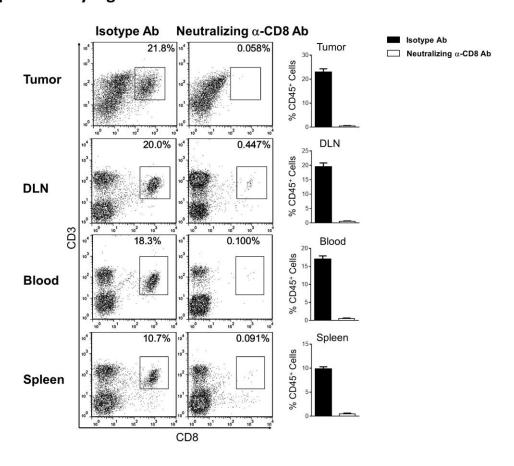
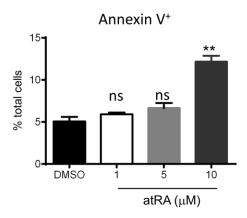
Supplementary Figure 1



Supplementary Figure 1. The efficiency of CD8⁺ T cell depletion.

Representative flow cytometry dot plots showing frequencies of CD8⁺ T cells in the tumor, DLN, blood and spleen of mice treated with neutralizing anti-CD8 antibody or isotype control antibody, and quantifications of frequencies of CD8⁺ T cells. Columns and error bars represent mean±SEM (n=4-5 mice per group). Similar results were obtained from three independent experiments.

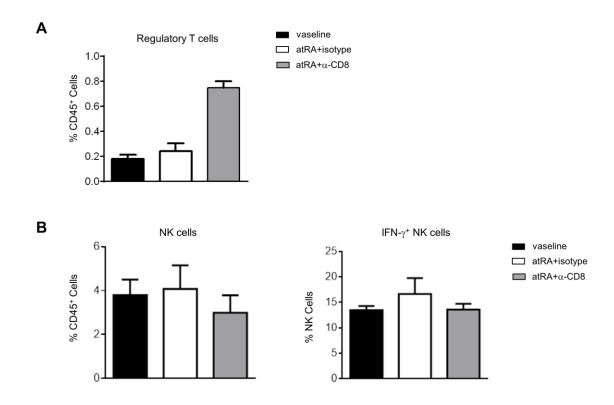
Supplementary Figure 2



Supplementary Figure 2. AtRA at 10 μM induced apoptosis of B16F10 cells.

Apoptosis detection was performed with the FITC Annexin V Apoptosis Detection Kit (556547, BD). The percentages of Annexin V $^+$ apoptotic cells in atRA or DMSO-treated B16F10 cells were detected by flow cytometry. **p< 0.01, ns = no significance. Columns and error bars represent of three replicate wells from a representative of three independent experiments.

Supplementary Figure 3



Supplementary Figure 3. Topical atRA treatment has no effect on tumor-infiltrating Tregs and NK cells.

(A-B) Averaged percentages of Tregs (CD4⁺CD25⁺Foxp3⁺) (A), as well as NK cells (CD3⁻NK1.1⁺), and IFN- γ ⁺ NK cells (B) in enzymatically dissociated tumor cells. Columns and error bars represent mean±SEM (n=5-7 per group). Similar results were obtained from three independent experiments.