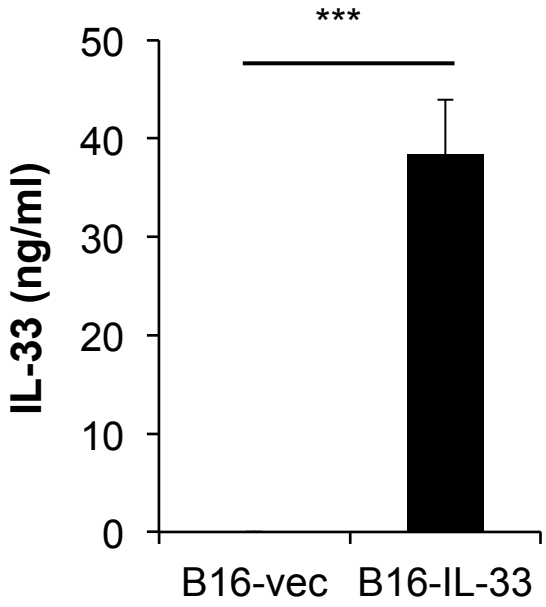
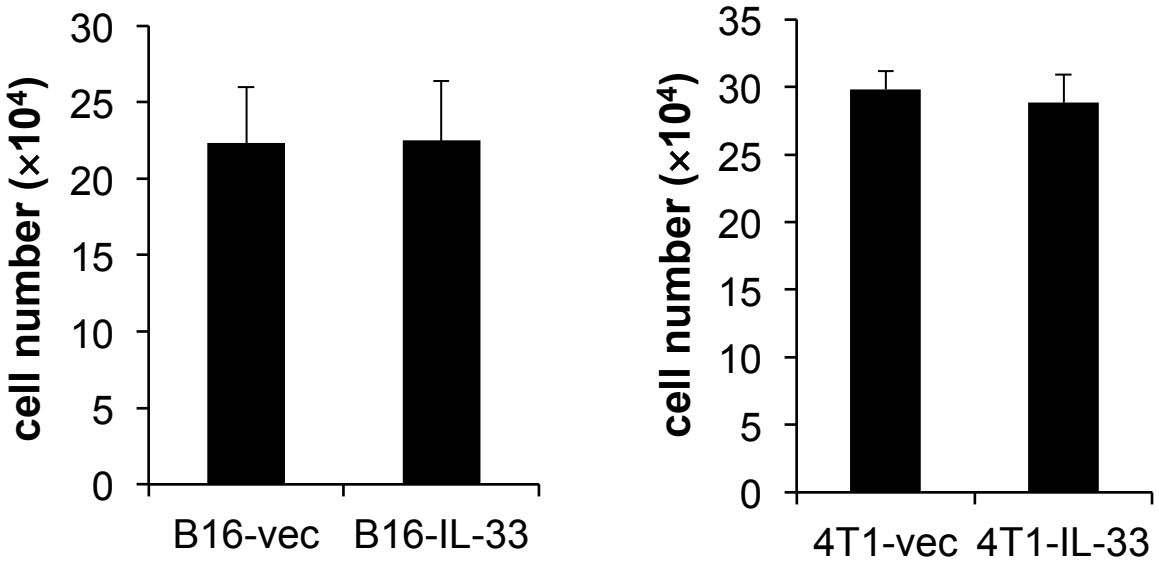
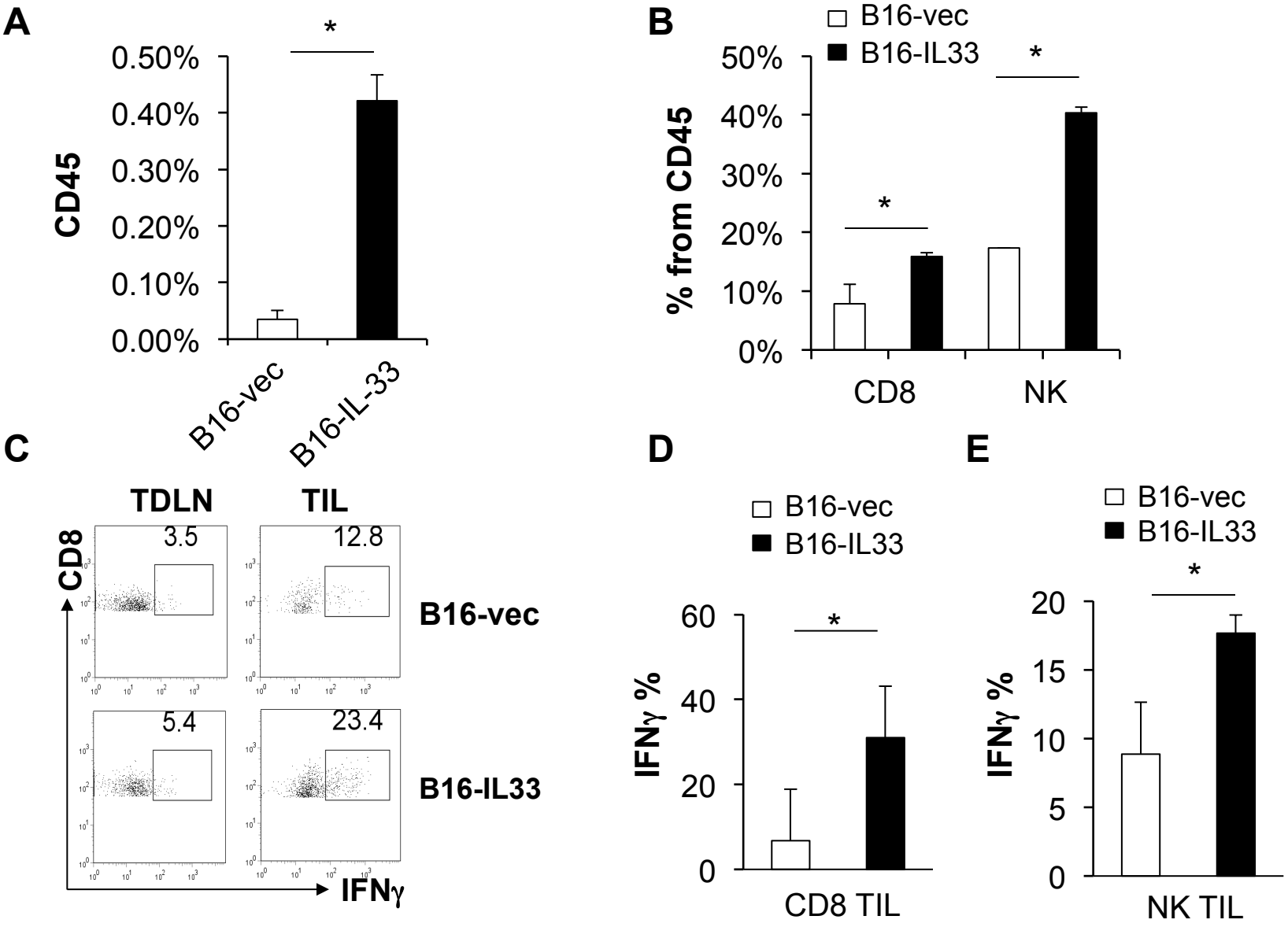


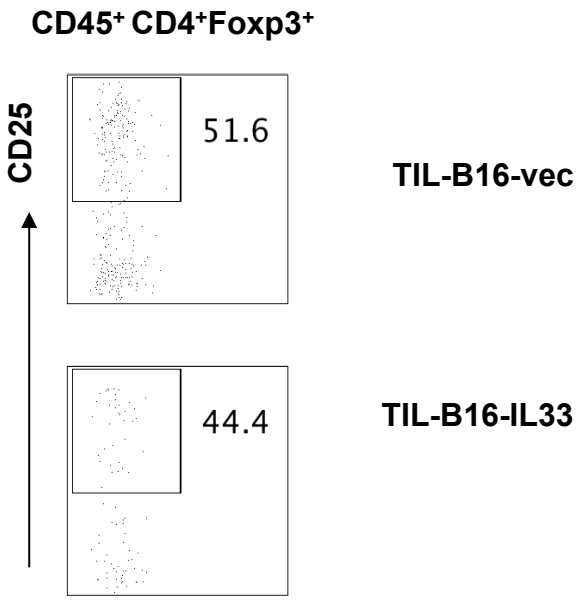
Supplementary figure 1. IL-33 protein was detected in the culture supernatant from B16-IL-33. 4×10^4 B16-vec or B16-IL-33 cells were respectively seeded into 24 wells in triplicates. The cells were cultured for 2 days, and the supernatants were collected for determining IL-33 expression by the ELISA assay. Data (mean ±SEM) are representative of three independent experiments.



Supplementary figure 2. IL-33 expression in B16 and 4T1 did not inhibit the proliferation of cell lines. 4×10^4 B16-vec, B16-IL-33, 4T1-vec or 4T1-IL-33 cells were seeded into 24 wells with triplicates. The cells were cultured for 2 days, the number of live cells was determined by live cell counting after cells were stained with Trypan blue. Data (mean ±SEM) are representative of three independent experiments.



Supplementary figure 3. Expression of IL-33 in B16 cells sustained type 1 immune responses in later stage of tumor formation. 2x10^5 B16-vector (B16) or B16-IL-33 cells were injected i.d. into B6 mice. On day 20, tumors were resected and processed to generate single a cell suspension. (A) Percentages of $CD45^+$ cells in tumor cell suspension. (B) Percentage of $CD8^+$ or $NK1.1^+$ cells within the $CD45^+$ population. (C) Representative flow cytometric plots showing $IFN\gamma^+$ $CD8^+$ T cells in tumor draining lymph node (TDLN) or in tumor (TIL). (D) Percentage of $IFN\gamma^+$ cells in $CD8^+$ TILs. (E) Percentage of $IFN\gamma^+$ cells in $NK1.1^+$ TILs. Results are mean ±SEM of three independent experiments. *P<0.05 and **P<0.01, two-tailed unpaired Student's t-test.



Supplementary figure 4. Treg in tumors. Representative flow cytometric analysis of CD25 expression on $CD4^+$ $Foxp3^+$ TIL.