**S6 Fig.** The therapeutic effects of PD-1 antibody dependent on the T cell and NK cells. (A) The mice were injected with $2 \times 10^5$ of LLC-1 mouse lung carcinoma cells stably expressing empty vector or PD-L1 vector and treated with 10 mg/kg of anti-PD-1 or control IgG. n=4 mice/group. The volume of tumors was monitored and measured on the indicated days during 25 days. (B) The growth of tumor volume was assessed by the final tumor volume. (C-I) The
mice were injected with $2 \times 10^5$ of LLC-1 mouse lung carcinoma cells. Where indicated, some mice were depleted of T cells by i.p. injection of 12.5 mg/kg anti-CD8α monoclonal antibodies and 25 mg/kg GK1.5 monoclonal antibodies, were depleted of NK cells by i.p. injection of 12.5 mg/kg μg PK136, or both before tumor cell injection (n=4 mice/group). (C) The effects of T cell, NK cells and, both of T cell and NK cell depletion on therapeutic effects of PD-1 antibody were determined by measuring the tumor volume with undepleted condition (D), T cell depleted condition (E), NK depleted condition (F), and both of T cell and NK cell depleted condition (G). (H) The PD-1 efficacy was determined by comparing the IgG1-treated and PD-1 antibody-treated tumor volume with indicated conditions. (I) The growth of the tumor volume was assessed by comparing the initial and final tumor volume. NK, natural killer; PD-1, programmed death-1; PD-L1, programmed death-ligand 1. *p < 0.05 and **p < 0.005, by a paired two-tailed Student’s t test.