

## Supplementary Figure 3. PD1 inhibition enhances survival benefit of CAR T treatment in KHM-5M xenografts.

- (A) E:T assays were carried out with CAR T-1 and NT cells alone or with combination of anti-PD1 antibody (5  $\mu$ g/ml) (n = 3; #, P = 0.06 for KHM-5M, 0.054 for 8505C; \*, P < 0.05; \*\*\*\*, P < 0.0001 by one-way ANOVA test). The analysis was independently repeated at least two times.
- (B) Survival curve of animals with KHM-5M xenografts with various treatments and no treatment is shown (n = 4 for all groups except for CAR Thi group, which is n = 3; \*, P < 0.05 by the log-rank test). NSG mice with KHM-5M xenografts were established with injecting 0.5x10 $_6$  cells intravenously. CAR Thi group was injected with 5x10 $_6$  ICAM1-CAR T (mAS) cells. CAR T $_6$  group was treated with 0.75x10 $_6$  CAR T cells either with anti-PD1 antibody administration (+) or alone (-). Administration of CAR T (i.v.) and  $\alpha$ PD1 antibody (i.p.) started ~5 days after xenograft. CAR T was a single treatment, while  $\alpha$ PD1 antibody (150  $\mu$ g/mouse) administration was twice a week for 5 weeks.