



**Supplementary Fig. S4:** Functional characterization of mB7-H3-CAR T cells with different domains **(A)** Summary plot of CD4 and CD8 composition of mB7-H3-CAR products at day 5 post-transduction ( $n = 4$ , mean  $\pm$  SD, 2-way ANOVA with Tukey's test for multiple comparisons). **(B)** Summary plot of memory phenotypes (Effector memory (EM): CD44<sup>+</sup>/CD62L<sup>-</sup>, central memory (CM): CD44<sup>+</sup>/CD62L<sup>+</sup>, naïve (N): CD44<sup>-</sup>/CD62L) of mB7-H3-CAR products ( $n = 4$ , mean  $\pm$  SD, 2-way ANOVA with Tukey's test for multiple comparisons). **(C)** MTS cytotoxicity assay against GL261 tumor cells at an effector to target (E:T) ratio of 4:1 ( $n = 7$ , mean  $\pm$  SD, 2-way ANOVA with Tukey's test for multiple comparisons). **(D)** MTS cytotoxicity assay against GL261 *B7h3* knockout (GL261-KO) tumor cells at an E:T ratio of 4:1 ( $n = 6$ , mean  $\pm$  SD, 2-way ANOVA with Tukey's test for multiple comparisons).