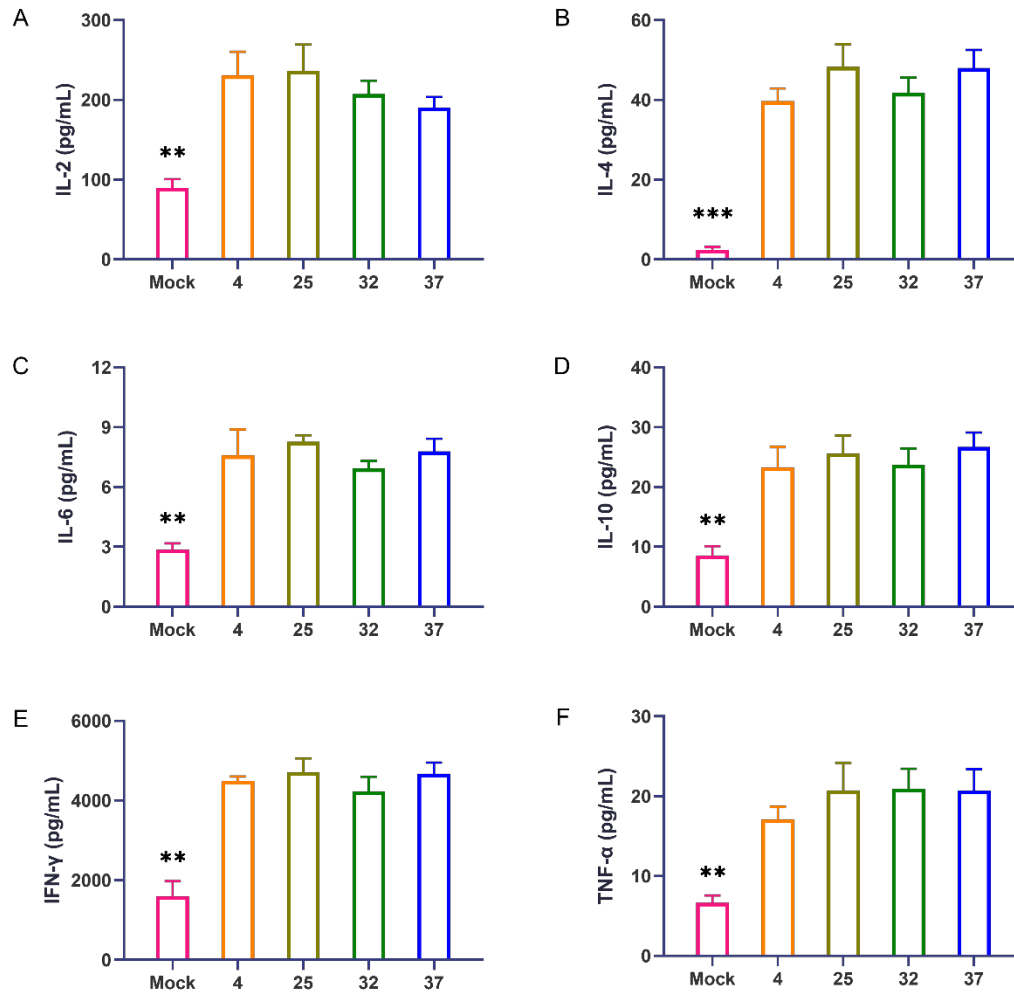
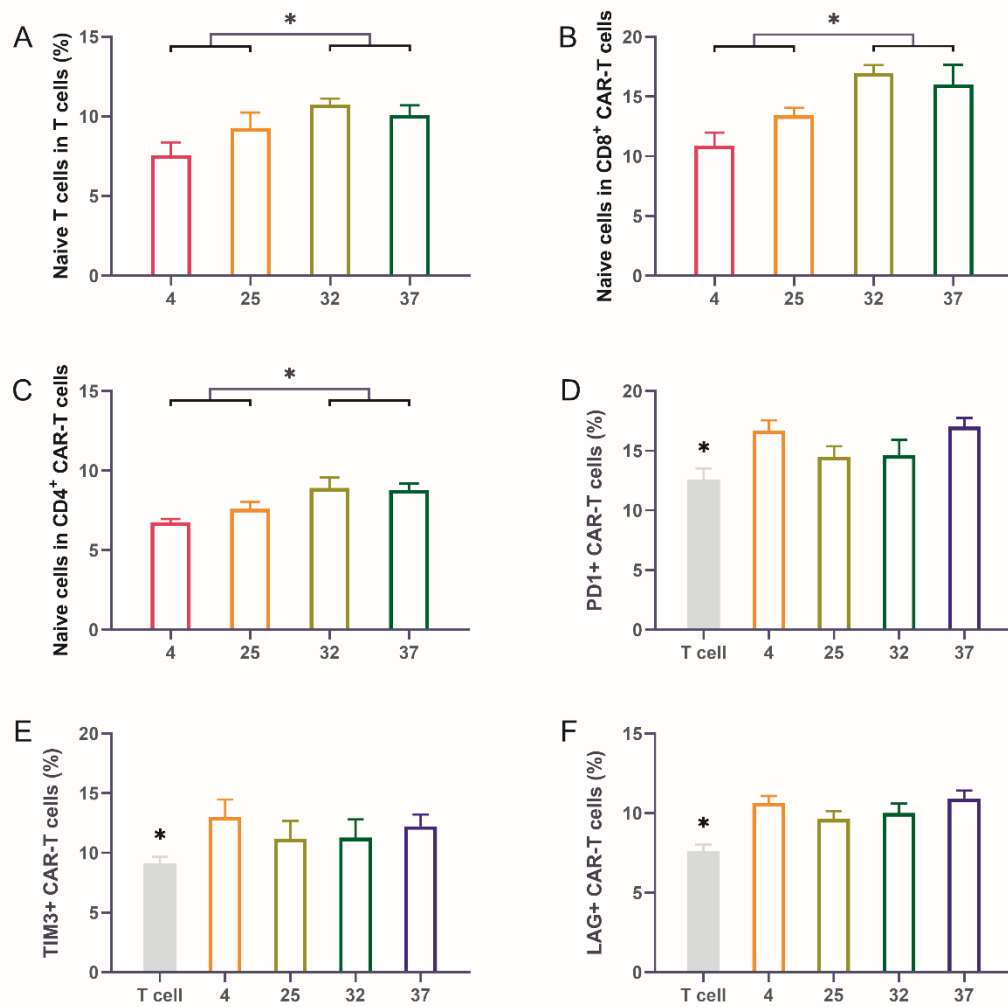


Supplementary Material



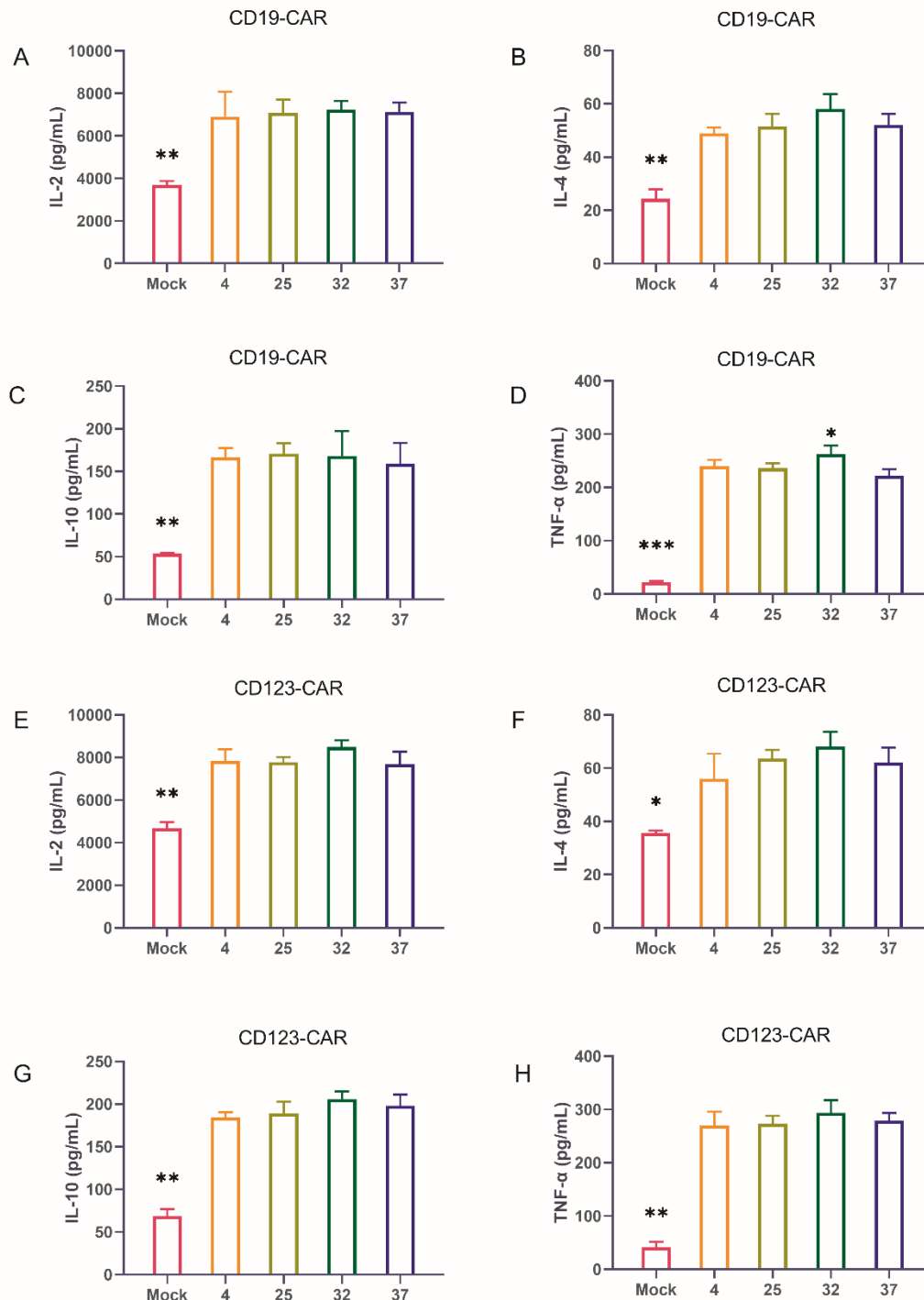
Supplement 1 Cytokine levels produced by CD19 CAR-T cells in the culture medium on day 6

(A-F) IL-2, IL-4, IL-6, IL-10, IFN- γ and TNF α levels in the culture medium on the 6th day of CD19 CAR-T cell production. Three independent experiments were conducted. Mean \pm SD. **p < 0.01, ***p < 0.001.



Supplement 2 Infection temperature can affect the distribution of CD123 CAR-T cell subsets and the expression of immune checkpoints

(A-C) The proportions of naive T cells among CD3-positive, CD8-positive and CD4-positive CD123 CAR-T cells generated at different infection temperatures. (D-F) The expression of PD1, TIM3, and LAG3 on the surface of CD123 CAR-T cells generated at different infection temperatures. Three independent experiments were conducted. Mean \pm SD. * $p < 0.05$.



Supplement 3 Levels of other secreted cytokines after incubation of CD19 CAR-T and CD123 CAR-T cells with tumor cells

(A) IL-2 level after coincubation of CD19 CAR-T cells and tumor cells. (B) IL-2 level after coincubation of CD123 CAR-T cells and tumor cells. (C) IL-2 level after coincubation of CD19 CAR-T cells and tumor cells. (D) IL-4 level after coincubation of CD123 CAR-T cells and tumor cells. (E) IL-10 level after coincubation of CD19 CAR-T cells and tumor cells. (F) IL-4 level after coincubation of CD123 CAR-T cells and tumor cells. (G) TNFα levels after coincubation of CD19 CAR-T cells and tumor

cells. **(H)** TNF α levels after coincubation of CD123 CAR-T cells and tumor cells. Three independent experiments were conducted. Mean \pm SD. *p < 0.05, **p < 0.01, ***p < 0.001.