



Promab Biotechnologies' CAR-T new product development programs are being designed for pre-clinical and future clinical applications.

CAR-T cells can be used for:

1. Compound screening
2. Antibody screening
3. Co-stimulatory and activation domain comparison
4. Personalized medicine and donor variations for CAR-T screening
5. Checkpoint inhibitors
6. Safety switches and regulators of CAR-T functions
7. Pre-clinical in vivo models
8. Treg and T memory cells in CAR-T setting
9. CAR-T signaling, tumor microenvironment
10. Proof of concept studies for clinical trials

The structure of CAR from Promab's available CAR-T cells targeting

ROR-1 protein is overexpressed in many hematological and solid tumors. ROR-1-CAR-T cells can be used to target tumors.

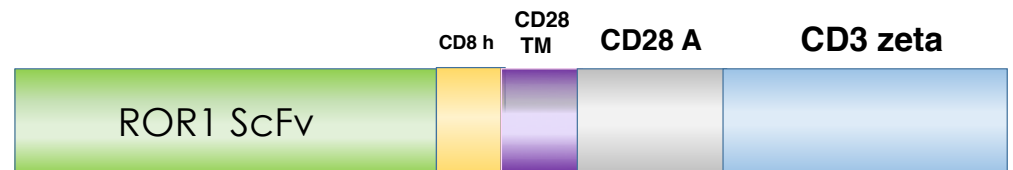


Figure 1. CAR-T cells expressing the above constructs are available from ProMab targeting ROR-1 antigen. ScFv (single chain variable fragment). These CAR-T cells are generated with ROR-1 CD28-CD3 zeta CAR construct.

To date, ProMab has generated 2nd generation CAR and CAR controls (as shown in Figure 1). ProMab has also generated CAR-T cells and CAR-NK (Natural Killer) effector cells against cancer target cells that show excellent functionality, including dose-dependent and target cell-specific cytotoxic activity.

These CAR-T cells can be tested with target cells in cytotoxic assays and used for testing modulators of immune checkpoint inhibitors (PD-1, CTLA-4 pathways), activators of immune response, or small molecules affecting T-cell or T-reg activity.



Data

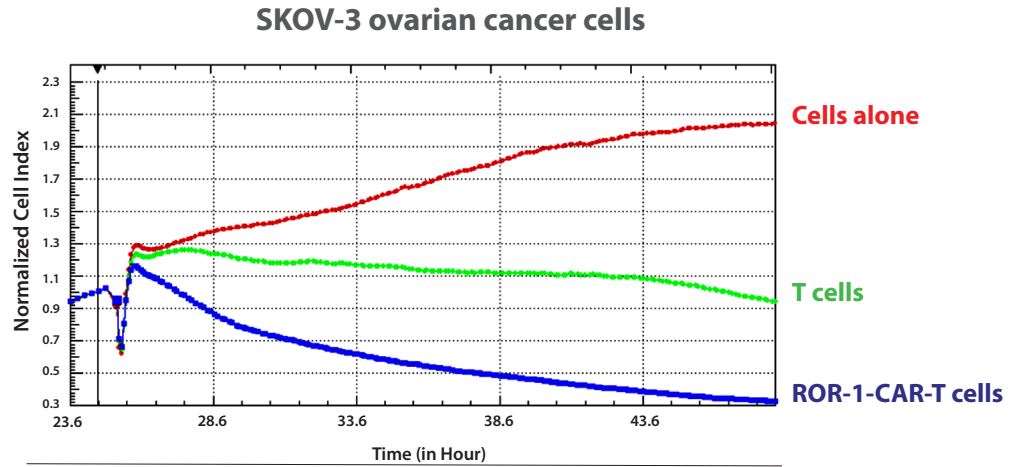


Figure 2. RTCA cytotoxicity activity of effector ROR-1-CAR-T cells against ROR-1-positive SKOV-3 ovarian cancer cells. Effector: Target cells ratio=10:1.