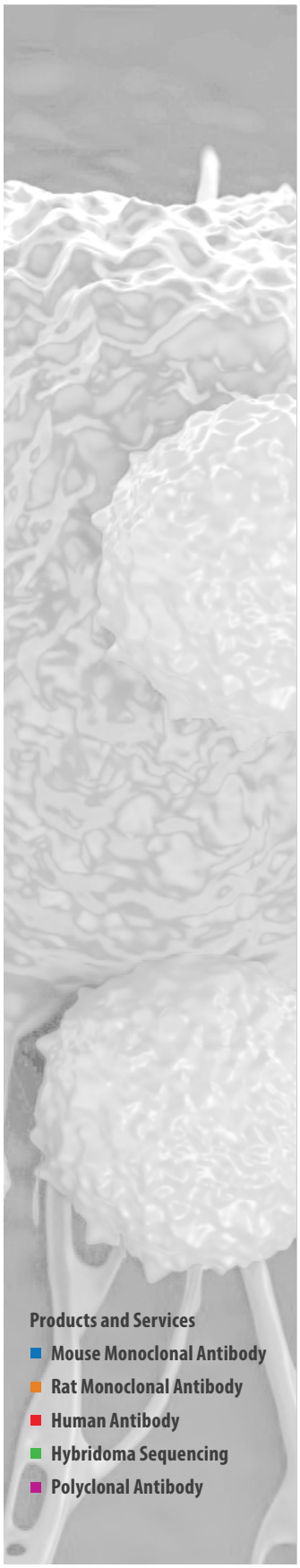
ProMab
Biotechnologies, Inc.

PM-CAR1063 HER2 SCFV-4-1BB-CD3Z-GFP PMC-302

Ready-to use-CAR-T cells



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:

HER2 is a member of the human epidermal growth factor receptor (HER/EGFR/ERBB) family. Amplification or over-expression of this oncogene has been shown to play an important role in the development and progression of certain aggressive types of breast cancer. In recent years the protein has become an important biomarker and target of therapy for >25% of breast cancer patients. Her-2 can be used as a tumor antigen for CAR-T immunotherapy.

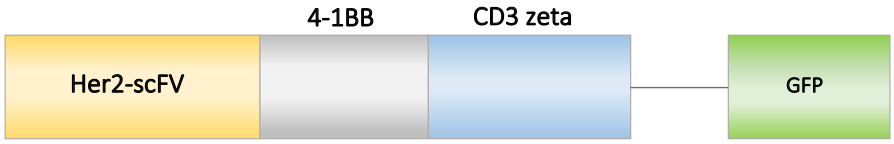


Figure 1. CAR-T cells expressing the above constructs are available from ProMab targeting Her2 antigens. ScFv means single chain variable fragment. These CAR-T cells are generated with Her2 CAR construct.

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.

ProMab Biotechnologies, Inc. | 2600 Hilltop Drive, Building B, Suite C320, Richmond, CA 94806 USA
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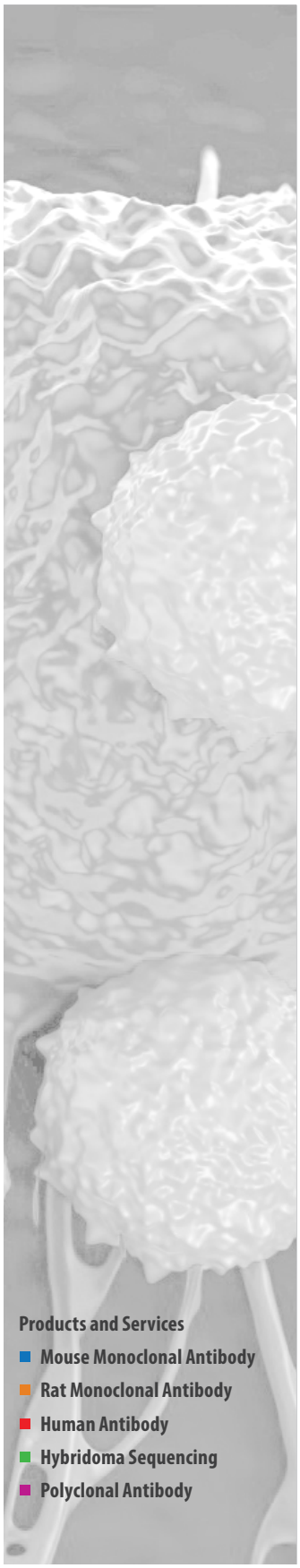

Products and Services

- Mouse Monoclonal Antibody
- Rat Monoclonal Antibody
- Human Antibody
- Hybridoma Sequencing
- Polyclonal Antibody

Data

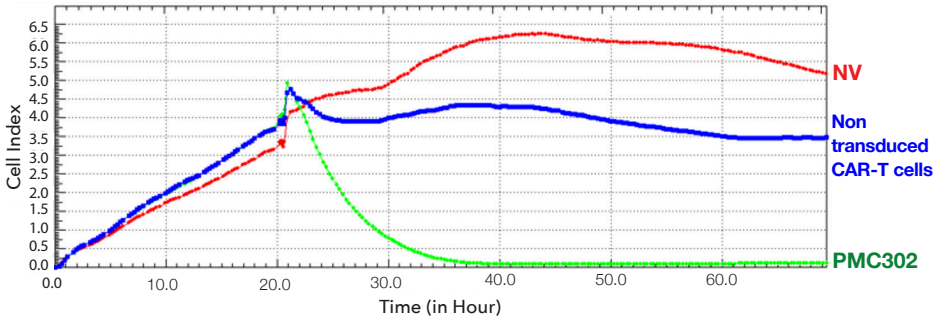

Figure 2. Cytotoxicity killing was verified by RTCA using SKOV3 as the target. PMC302 is Her2 CAR-T cells. NV is non-virus, SKOV3 cells.

Data

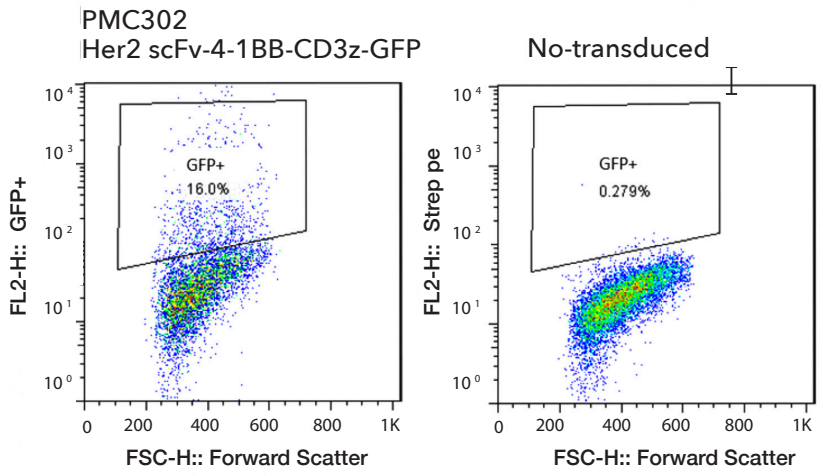

Figure 3. Expression of GFP was verified by FACS. Comparison of GFP via FACS done by PMC302 (Her2-GFP CAR-T cells) and non-transduced T-cells.

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