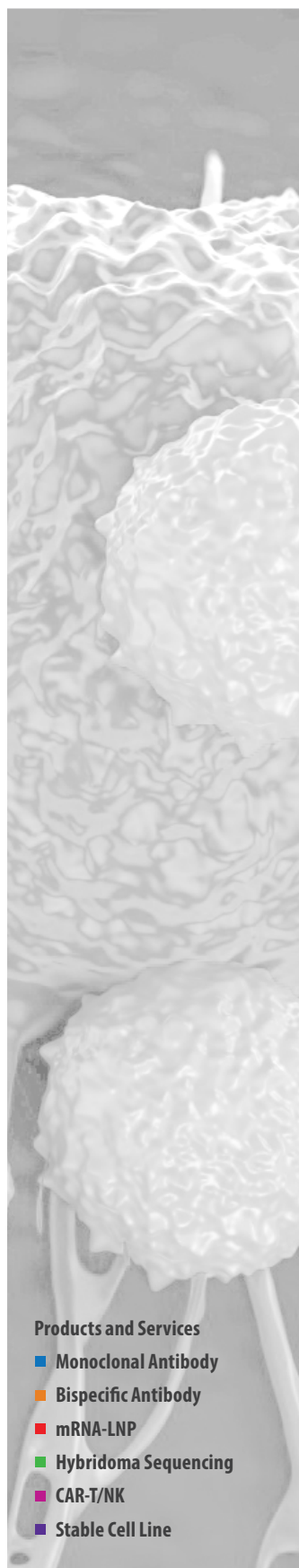


## Anti-BCMA/Anti-CD3-Fc mRNA-LNP

Ready-to-use lipid nanoparticles



### Order Information

Catalog# PM-LNP-0110                      Size 200uL

### Description

BCMA (B cell maturation antigen) is a type III membrane protein encoded by the TNFRSF17 gene and expressed on mature B cells and plasma cells. BCMA binding to TNFSF13B/BAFF results in activation of the NF- $\kappa$ B and MAPK8/JNK signaling pathways. BCMA is highly expressed in malignant plasma cells and currently serves as an excellent therapeutic target for multiple myeloma. CD3 is a protein complex expressed by all T cells that facilitates antigen recognition. ProMab's PM-LNP-0110 nanoparticles contain an mRNA encoding an anti-BCMA, anti-CD3 bispecific antibody with a modified human IgG Fc domain (L234A, L235A and P329G). The nanoparticles are formulated with SM-102, DSPC, cholesterol and DMG-PEG2000 at an optimal molar concentration for a high rate of encapsulation and efficient mRNA delivery in vitro and in vivo.

### Composition

mRNA-LNPs are suspended in PBS (-Ca, -Mg) (pH: 7.0-7.4).

### Storage

Product is delivered on wet ice. Store at 4°C for up to 3 months.

### Handling

Upon receipt, centrifuge the vial for a few seconds to ensure the contents are located at the bottom of the vial. Vortex mixing or prolonged centrifugation may rupture the nanoparticles. Store the vial of nanoparticles in the refrigerator and keep on ice when in use. Do not allow the nanoparticles to warm to room temperature. mRNA-LNP suspensions should only be handled with certified RNase-free reagents and consumables. The use of filtered pipette tips is highly recommended.

## Anti-BCMA/Anti-CD3-Fc mRNA-LNP

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#### Safety & Research Disclosure

All ProMab mRNA lipid nanoparticle products are for in vitro research use only. Products are not FDA approved for human use.

#### Protocol for Transfecting Suspension Cells

Suspend 0.5 - 1 million cells in 1 ml of culture medium. Ensure the cells are healthy and well-dispersed, as cell clumping may reduce transfection efficiency. Disperse the nanoparticle suspension by gently pipetting up and down several times, then slowly add 20-40  $\mu$ l to the cells, dropwise. Gently mix the cells and incubate them overnight in a culture incubator. The next day, and every day thereafter, check the culture for expression of the protein encoded by the mRNA-LNP. Cell-bound proteins can be detected by flow cytometry or western blotting using the transfected cells, whereas secreted proteins can be detected by ELISA, western blotting or flow cytometry (on a target cell line) using the medium collected from the transfected cells.

#### Anti-BCMA/anti-CD3-Fc Secreted from HEK293S Cells Treated with PM-LNP-0110: Binding to CD3+ cells

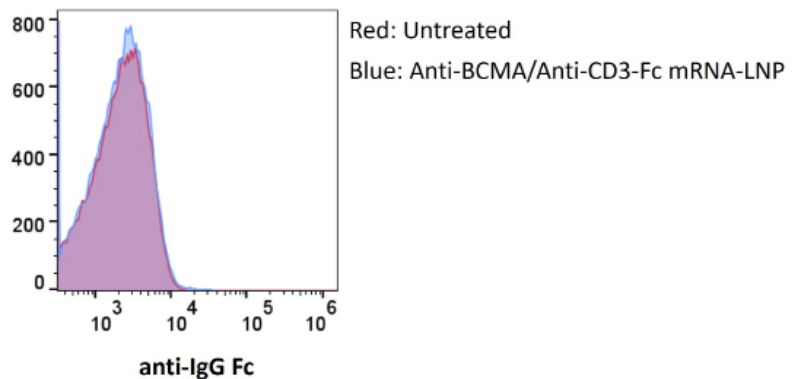


Figure 1. Flow Cytometry. Medium collected from PM-LNP-0110 nanoparticle-treated HEK293S cells contains anti-BCMA/anti-CD3 bispecific antibody, detected by binding to human T cells and then staining with an anti-IgG Fc antibody.

#### Products and Services

- Monoclonal Antibody
- Bispecific Antibody
- mRNA-LNP
- Hybridoma Sequencing
- CAR-T/NK
- Stable Cell Line