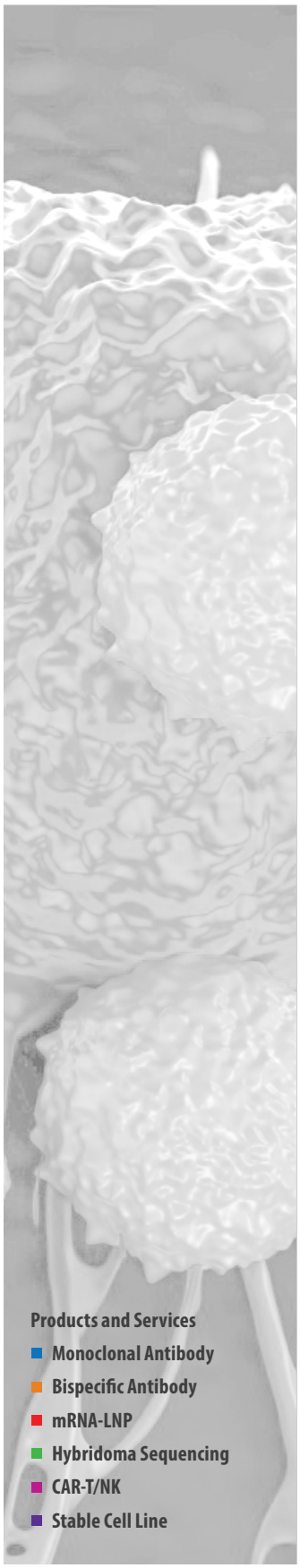
ProMab Biotechnologies, Inc.

CXCL10-TF mRNA-LNP

Ready-to-use lipid nanoparticles



Order Information

Catalog# PM-LNP-0131 Size 200uL

Description

Chemokine CXCL10, also known as IP10 (interferon gamma-induced protein 10) is a chemokine produced by monocytes, fibroblasts and endothelial cells in response to IFN-gamma. CXCL10 induces chemotaxis and tissue extravasation of monocytes, T cells, NK cells and dendritic cells bearing the chemokine receptor CXCR3. CXCL10 also inhibits bone marrow colony formation and angiogenesis. In cancer, CXCL10 and its two family members, CXCL9 and CXCL11, promote CXCR3+ suppressor T cell infiltration into solid tumors, polarizing of tumor-associated macrophages toward an immunosuppressive phenotype. CXCL10 is comprised of 98 amino acids and its GenPept accession number is NP_001556. ProMab's PM-LNP-0131 nanoparticles contain an mRNA encoding CXCL10 and a C-terminal TF tag (15 amino acids) protected by a lipid shell. 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.

ProMab Biotechnologies, Inc. | 2600 Hilltop Drive, Building B, Suite C320, Richmond, CA 94806 USA
Toll free 1-866-339-0871 | 1-510-860-4615 (Sales) | 1-510-860-4614 (Technical Support) | Fax 1-510-740-3625 | info@ProMab.com | www.ProMab.com

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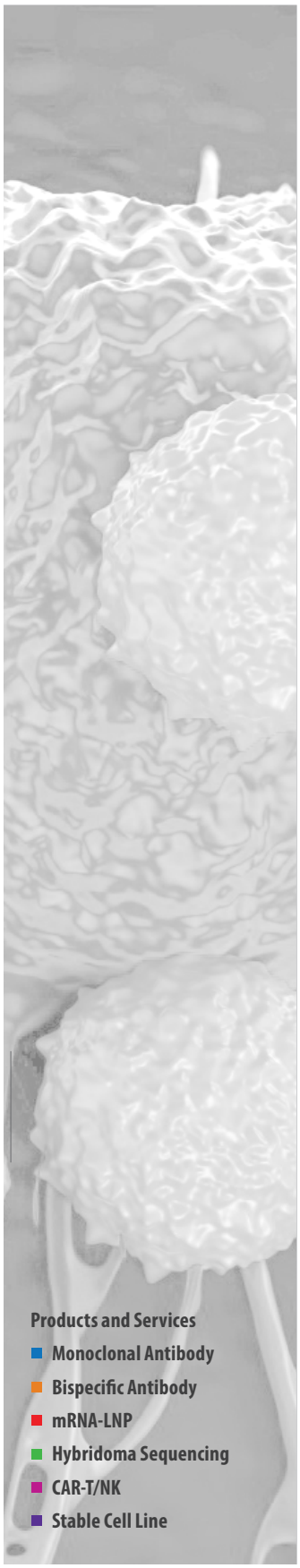

Products and Services

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

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 ul 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.

CXCL10 Secretion from HEK293S Cells Treated with PM-LNP-0131

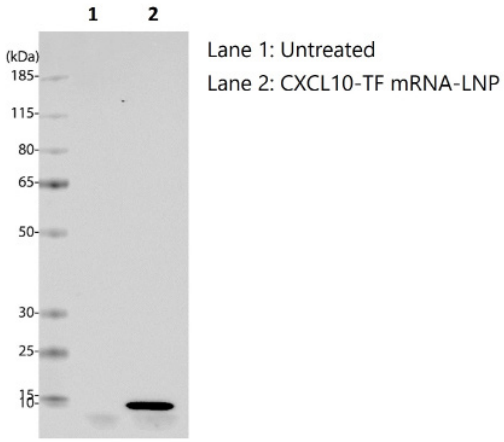

Figure 1. Western blot. Medium collected from PM-LNP-0131 nanoparticle-treated HEK293S cells contains TF-tagged CXCL10, detected with an anti-TF antibody.

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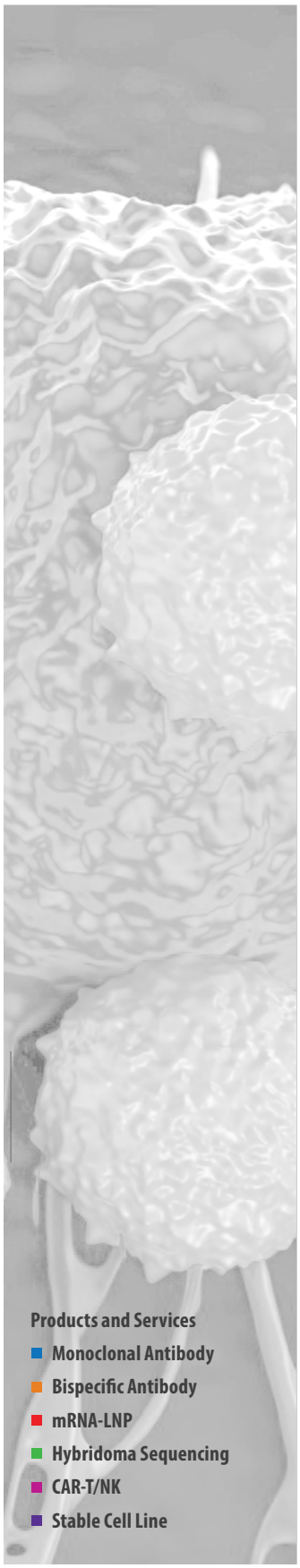

CXCL10 Expression in HEK293S Cells Treated with PM-LNP-0131

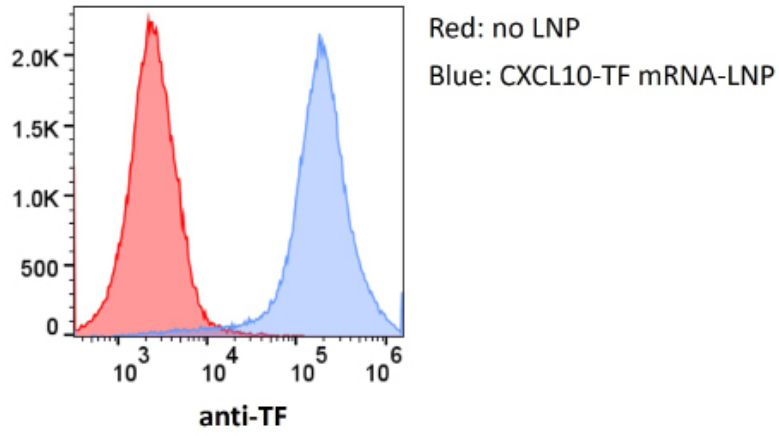

Figure 2. Flow Cytometry. PM-LNP-0131 nanoparticle-treated HEK293S cells express TF-tagged CXCL10, detected with an anti-TF antibody.

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