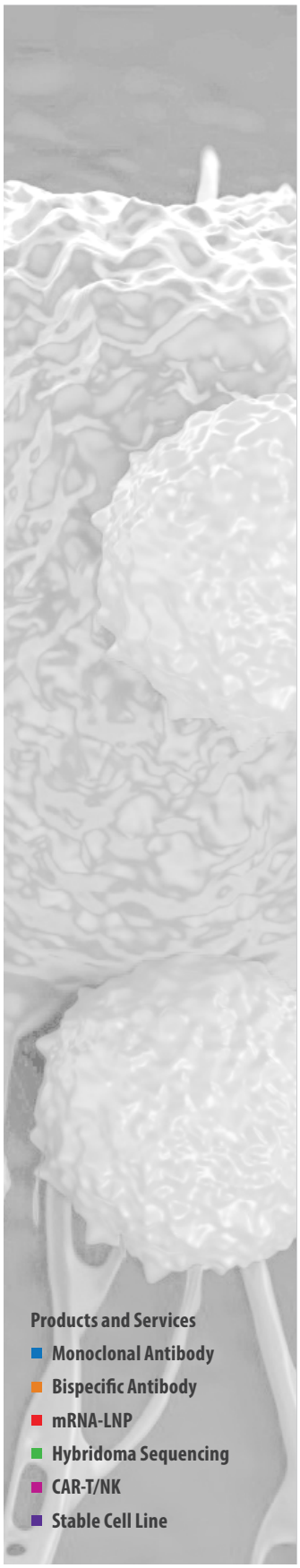
ProMab Biotechnologies, Inc.

# PD-L1-TF mRNA-LNP

## Ready-to-use lipid nanoparticles



**Products and Services**

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

### Order Information

| Catalog# | Size | GenPept No. |
|---|---|---|
| PM-LNP-0077 | 200uL | |

### Description

PD-L1 (programmed cell death protein ligand 1), also known as CD274, is a type 1 transmembrane protein mainly expressed on the cell surface of tumor cells or antigen-presenting cells. PD-1, (also known as CD274), is a membrane protein of the human immunoglobulin superfamily, expressed on the surface of T cells, primary B cells, and myeloid-derived dendritic cells. PD-1 and PD-L1 were also found to be co-expressed on the surface of SCLC cancer cells. PD-1/PD-L1 act as inhibitory checkpoint molecules in the immune system. PD-1 binds to PD-L1 to form a complex and transmit inhibitory signals to reduce the proliferation and activity of killer T lymphocytes. Blocking PD-1 with anti-PD-1 antibody, or blocking PD-L1 with anti-PD-L1 antibody, can inhibit the formation of PD-1/PD-L1 complex, thereby

### Composition

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

### Translated Protein sequence

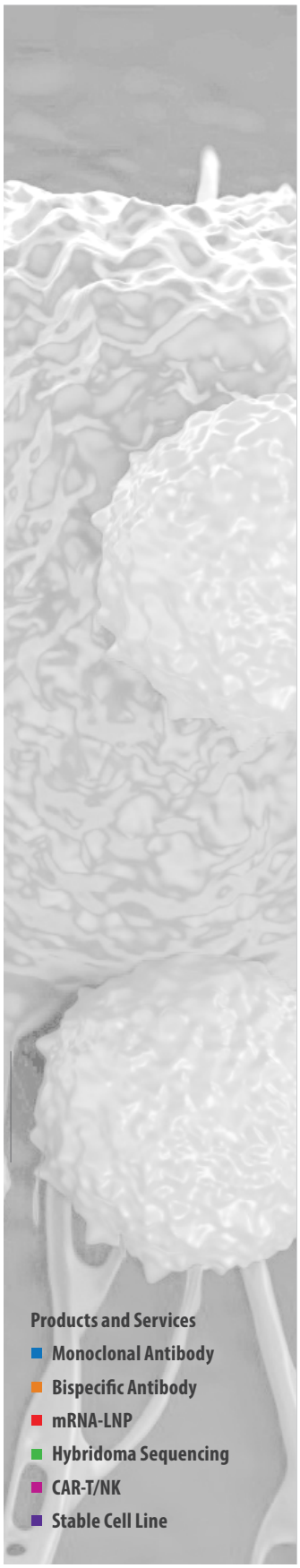
Available up request

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

ProMab Biotechnologies, Inc.

# PD-L1-TF mRNA-LNP

## Ready-to-use lipid nanoparticles




### Storage

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

### Application & Handling

Upon receiving product, briefly pulse spin before opening to ensure product is at bottom of container. It is important not to spin for too long as this may rupture mRNA-LNPs. Do not vortex. Work with mRNA-LNPs on ice and minimize the time that the product spends at room temperature. After handling the product during experiments, return immediately to ice. mRNA-LNP products should only be handled with certified RNase-free reagents and consumables. Use of filtered pipette tips is highly recommended.

### Safety & Research Disclosure

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

### General Protocol

1. Prior to transfection: Plate 1ml of cells at a density of [1.0E6 cells/ml] in a single well of a 12-well culture plate. Ensure the cells you are using are viable and healthy. Try not to let your cells sit for longer than 5 minutes prior to transfection. Cell clumping at the time of transfection may reduce transfection efficiency. *Note: If cell clumping occurs, gently pipette your culture up & down to ensure you have a single cell suspension before transfecting.

2. Briefly pipette mRNA-LNP mix up & down to resuspend. Add 20-40ul of the mRNA-LNP product dropwise directly to your 1ml culture. Gently tilt plate back and forth to mix (not necessary if you are using cells which will be immediately placed back into a shaker). Place your transfected cells back into their original culture conditions.

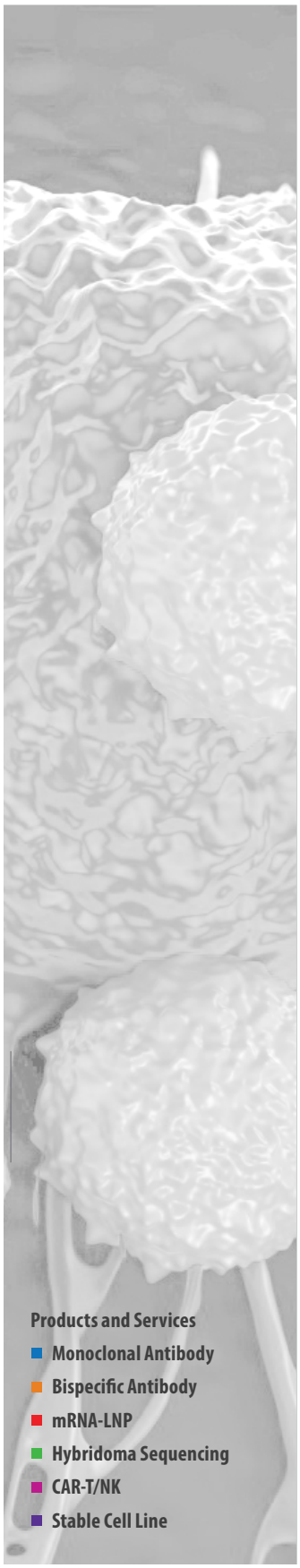
3. Check cell expression by FACS or by using other detection methods at 24hr intervals after transfection. *Note: This is a generalized protocol for transfection using mammalian suspension culture cells. Transfection volume may be scaled up or down proportionately using the volumes given. HEK-293s cells were grown and transfected in FreeStyle™ F17 Expression Medium (Gibco, Cat#: A1383501), supplemented with GlutaMAX™ (Gibco, Cat#: 35050061), and Poloxamer 188 Non-ionic Surfactant (Gibco, Cat#: 24040032). T-cells were grown and transfected in a culture medium supplemented with 10% FBS (Omega Scientific, Cat#: FB-02). When transfecting cells using mRNA-LNPs, it is typically necessary for the cell culture medium to be supplemented with 10% FBS at the time of transfection. Without this supplement, transfection efficiency will drop significantly. For mRNA-LNP transfection of cells which cannot use FBS in the culture medium, please contact us at (510) 860-4615. Alternative transfection methods are available.

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

ProMab
Biotechnologies, Inc.

# PD-L1-TF mRNA-LNP

## Ready-to-use lipid nanoparticles



**Products and Services**

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

**Expression of PDL-1 mutant (C->S, secreted) in S293 Cells Transfected with PM-LNP-0077**

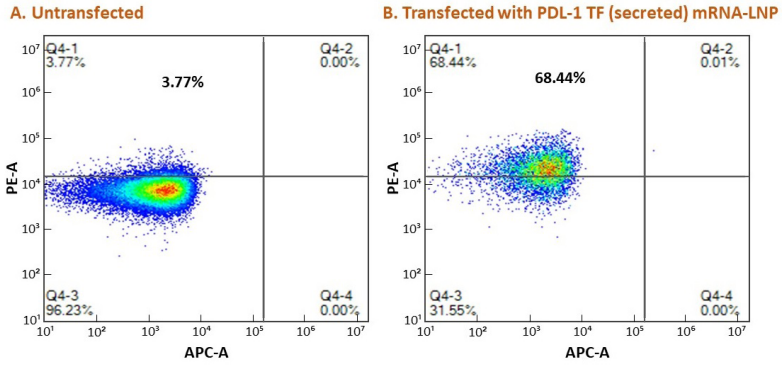



Figure 1. Flow Cytometry. PM-LNP-0077 nanoparticle-treated HEK293S cells secrete TF-tagged PD-L1 protein, detected with a labeled anti-CD274 antibody (ProMab, Cat# 31530).

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