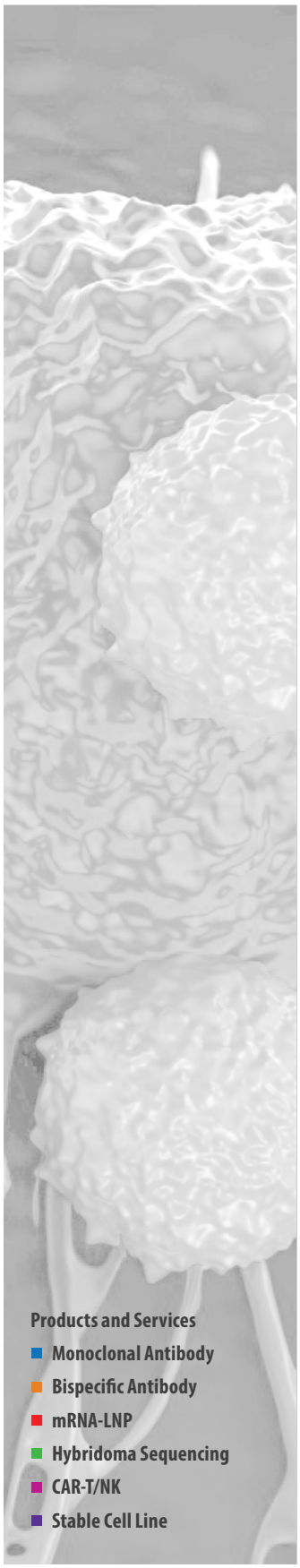
ProMab Biotechnologies, Inc.

Hsp90-TF mRNA-LNP

Ready-to-use lipid nanoparticles



Order Information

Catalog# PM-LNP-0127 Size 200uL

Description

Hsp90 (90 kDa heat shock protein), encoded by the HSP90AB1 (heat shock protein 90 alpha family class B member 1) gene, is an ATPase with multiple functions including protein folding, protein degradation, mitochondrial protein import and steroid-mediated transcriptional upregulation. Hsp90 also aids tumor cells by stabilizing growth factors and signaling proteins, protecting mutated proteins, and inducing pro-angiogenic proteins. Hsp90 inhibitors have been shown to exhibit antitumor effects. Hsp90 consists of 732 amino acids and its GenPept accession number is NP_001258898. ProMab's PM-LNP-0127 nanoparticles contain an mRNA encoding Hsp90 and a C-terminal TF tag 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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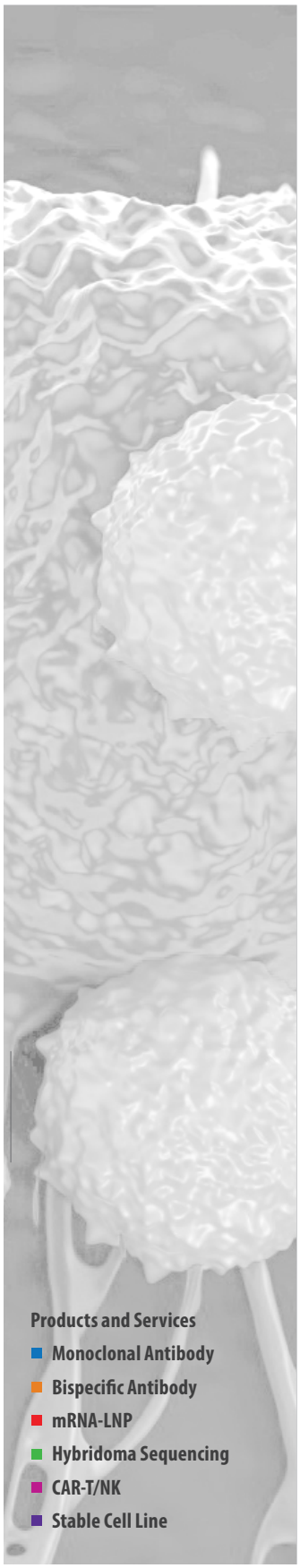

Products and Services

- 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.

Hsp90 Expression in HEK293S Cells Treated with PM-LNP-0127

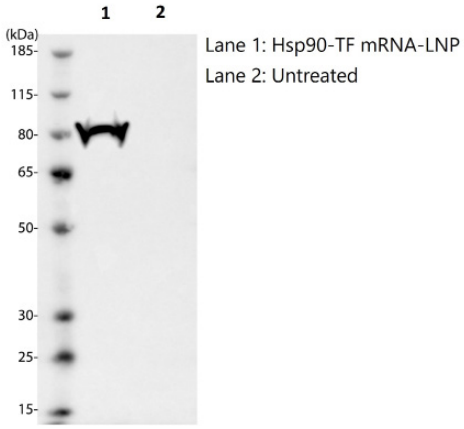

Figure 1. Western blot. Lysed PM-LNP-0127 nanoparticle-treated HEK293S cells contain TF-tagged Hsp90, detected with an anti-TF antibody.

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