

User Guide: mRNA Synthesis Product

Dear Customer,

Thank you for your trust and support in us! Before using your custom-synthesized mRNA products, please review the following guidelines to ensure optimal product performance.

✧ mRNA Handling & Usage

Your mRNA is synthesized via *in vitro* transcription (IVT) and supplied as a liquid solution, shipped on dry ice. Upon arrival, the mRNA may appear as a white pellet or concentrate at the bottom of the tube.

For first use:

1. Thaw the mRNA on ice.
2. Briefly centrifuge the tube before opening.
3. Aliquot the solution into single-use portions to avoid repeated freeze-thaw cycles.
4. Use only certified RNase-free reagents, tubes, and tips, and maintain RNase-free techniques throughout.

For storage after aliquoting:

- Store at $\leq -70^{\circ}\text{C}$ for long-term stability.
- Avoid repeated thawing and freezing, as this can degrade mRNA integrity.

✧ Applications

The mRNA supplied is suitable for most standard *in vitro* cell transfection experiments. It can be delivered using a variety of commercially available

transfection reagents designed specifically for mRNA, according to manufacturer protocols.

Best practices for RNA work

- If possible, designate a clean, separate area for RNA handling.
- Before starting, sanitize your bench surface and pipettes with RNase inactivating agents.
- Always wear clean gloves and use RNase-free consumables.

✧ **Storage Condition**

Upon receipt, store mRNA at $\leq -70^{\circ}\text{C}$. Minimize freeze-thaw cycles to maintain product stability and performance.

Thank you again for choosing our services. Should you have any questions, please do not hesitate to contact us.