

## eGFP mRNA (m1Ψ) Product Datasheet

Catalog Number: CPR00011, CPR00012

### Product Description

This product is an mRNA encoding enhanced Green Fluorescent Protein (eGFP). Derived from *Aequorea victoria*, eGFP is a commonly used fluorescent reporter protein in mRNA drug development. It emits bright green fluorescence upon excitation with a 488 nm laser, featuring an excitation peak at 488 nm and an emission peak at 509 nm.

This product is capped with a Cap1 (m7GpppNmpNp) structure, which exhibits high capping efficiency to improve mRNA stability. All uridine (U) residues in the sequence are fully substituted with N1-Methylpseudouridine (m1Ψ), significantly enhancing protein expression levels and reducing immunogenicity. Additionally, this product contains a Poly(A) tail of no less than 100 nts, which increases intracellular mRNA stability and protein translation efficiency.

### Product Information

<b>mRNA length</b>	997 nt
<b>Concentration</b>	1.0 mg/mL
<b>Storage Buffer</b>	25 mM Sodium Acetate (pH 5.0) or Water for Injection
<b>Recommended Storage Conditions</b>	Short-term storage at -20°C (3 months); long-term storage at ≤-70°C (2 years)
<b>Cap</b>	Cap 1
<b>NTP Modification</b>	N1-Methylpseudouridine (m1Ψ)

### Product Specification

Catalog Number	Specification
CPR00011	0.2 mg
CPR00012	1 mg

## **Operation Instructions**

1. For first use, thaw the mRNA on ice until completely thawed, briefly centrifuge the tube before opening.
2. Before starting, sanitize your bench surface and pipettes with RNase inactivating agents.
3. Aliquot the solution into single-use portions to avoid repeated freeze-thaw cycles.
4. After aliquoting, store at s -70°C for long-term stability. Avoid repeated thawing and freezing, as this can degrade mRNA integrity.
5. During operation, use certified RNase-free reagents and consumables, and adopt standard RNase-free operating techniques.



## **Important Notes**

- This product is for laboratory research use only.
- Not for direct human use, including but not limited to any clinical applications such as oral administration, injection, etc.

## **Technical Support**

For product-related inquiries or technical support, please contact [sales.us@quintarabio.com](mailto:sales.us@quintarabio.com).

## **Additional Services**

In addition to the off-the-shelf products in the catalog, Quintara also provides screening grade, research grade and preclinical grade custom mRNA-LNP production services. For more service information, please contact [sales.us@quintarabio.com](mailto:sales.us@quintarabio.com).