Fluc mRNA (m1Ψ) Product Datasheet

Catalog Number: QPM90002-M, QPM90002-L

Product Description

This product is an mRNA encoding Firefly-Luciferase (Fluc). In molecular biology research, Fluc is widely used for monitoring mammalian cell viability and target gene expression levels. Upon efficient delivery into cells or animal bodies, this product expresses intracellular Firefly-Luciferase, which produces a bioluminescent signal in the presence of the substrate Luciferin.

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

Product Information

mRNA length	1918 nt
Concentration	1.0 mg/mL
Storge Buffer	25 mM Sodium Acetate (pH 5.0) or Water for Injection
Recommended Storage Conditions	Short-term storage at -20℃ (3 months); long-term storage at ≤-70℃ (2 years)
Cap	Cap 1
NTP Modification	N1-Methylpseudouridine (m1Ψ)

Product Specification

Catalog Number	Specification
CPR00013	0.2 mg
CPR00014	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.

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.