

# PRODUCT INFORMATION



## BFP mRNA (Cap-1; m1Ψ)

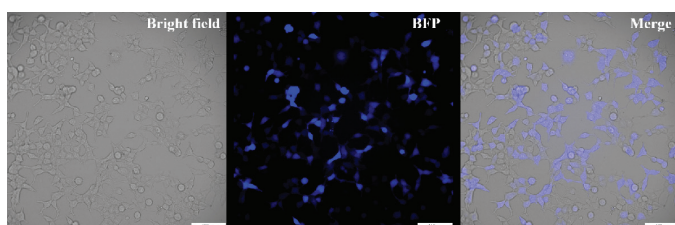
Item No. 43678

### Overview and Properties

|                       |  |
|-----------------------|--|
| <b>Synonyms:</b>      | Blue Fluorescent Protein mRNA (Cap-1; N <sup>1</sup> -Methylpseudouridine) |
| <b>Storage:</b>       | -80°C (as supplied)  |
| <b>Stability:</b>     | ≥2 years   |
| <b>Supplied in:</b>   | 1 mM Sodium citrate, pH 6.4  |
| <b>Concentration:</b> | 1 mg/ml  |
| <b>Ex./Em. Max:</b>   | 380/440 nm   |

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Image



BFP mRNA in 293 T cells 24 hours post-transfection.

### Description

BFP mRNA (Cap-1; m1Ψ) encodes blue fluorescent protein (BFP), a variant of GFP that contains chromophore mutations that shift the excitation and emission maxima to 380 and 440 nm, respectively. It is capped using a co-transcriptional capping method, resulting in the naturally occurring Cap-1 structure with high capping efficiency. BFP mRNA is also polyadenylated and modified with N<sup>1</sup>-methylpseudouridine (m1Ψ) to reduce the host cell immune response and enhance mRNA stability. Encapsulation of BFP mRNA (Cap-1; m1Ψ) in lipid nanoparticles (LNPs) can be used for mRNA delivery and expression of BFP.

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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