

PRODUCT INFORMATION



mOrange mRNA (Cap-1; m1Ψ)

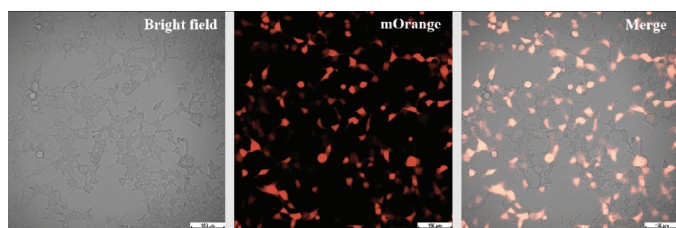
Item No. 43680

Overview and Properties

Synonym:	mOrange mRNA (Cap-1; N ¹ -Methylpseudouridine)
Storage:	-80°C (as supplied)
Stability:	≥2 years
Supplied in:	1 mM Sodium citrate, pH 6.4
Concentration:	1 mg/ml
Ex./Em. Max:	548/562 nm

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

Image



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

Description

mOrange mRNA (Cap-1; m1Ψ) encodes mOrange, an orange fluorescent protein and derivative of *Discosoma* red fluorescent protein (DsRed) that displays excitation and emission maxima to 548 and 562 nm, respectively.¹ It is capped using a co-transcriptional capping method, resulting in the naturally occurring Cap-1 structure with high capping efficiency. mOrange mRNA is also polyadenylated and modified with N¹-methylpseudouridine (m1Ψ) to reduce the host cell immune response and enhance mRNA stability. Encapsulation of mOrange mRNA (Cap-1; m1Ψ) in lipid nanoparticles (LNPs) can be used for mRNA delivery and expression of mOrange.

Reference

1. Shaner, N.C., Campbell, R.E., Steinbach, P.A., *et al.* Improved monomeric red, orange and yellow fluorescent proteins derived from *Discosoma* sp. red fluorescent protein. *Comparative Study* **22(12)**, 1567-1572 (2004).

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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