

New England Biolabs Product Specification

Product Name: $m^7G(5')ppp(5')G$ RNA Cap Structure Analog
Catalog #: S1404S/L
Concentration: 1 μ mol
Shelf Life: 36 months
Storage Temp: -20°C
Storage Conditions: Supplied as a lyophilized Sodium salt
Specification Version: PS-S1404S/L v1.0
Effective Date: 10 Aug 2018

Assay Name/Specification (minimum release criteria)

Functional Testing (Incorporation using RNA Polymerase) - A 20 μ l reaction in RNA Polymerase Reaction Buffer in the presence of 4 mM NTPs +/- $m^7G(5')ppp(5')G$ RNA Cap Structure Analog containing 2 μ g of template DNA and 50 units of T7 RNA Polymerase incubated for 2 hours at 37°C results in the expected product as determined by polyacrylamide gel electrophoresis.

Molecular Weight Determination (Mass Spectrometry) - The molecular weight of $m^7G(5')ppp(5')G$ RNA Cap Structure Analog is between 802.4 and 804.4 as determined by mass spectrometry analysis.

Physical Purity (HPLC) - $m^7G(5')ppp(5')G$ RNA Cap Structure Analog is \geq 95% pure as determined by HPLC analysis.



Date 10 Aug 2018

Derek Robinson
Director of Quality Control

