

New England Biolabs Certificate of Analysis

Product Name: *m7G(5')ppp(5')G RNA Cap Structure Analog*
Catalog Number: *S1404S*
Lot Number: *10050151*
Expiration Date: *05/2022*
Storage Temperature: *-20°C*
Storage Conditions: *Supplied as a lyophilized Sodium salt*
Specification Version: *PS-S1404S/L v1.0*

m7G(5')ppp(5')G RNA Cap Structure Analog Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S1404SVIAL	m7G(5')ppp(5')G RNA Cap Structure Analog	10042649	Pass

Assay Name/Specification	Lot # 10050151
Physical Purity (HPLC) m7G(5')ppp(5')G RNA Cap Structure Analog is $\geq 95\%$ pure as determined by HPLC analysis.	Pass
Molecular Weight Determination (Mass Spectrometry) The molecular weight of m7G(5')ppp(5')G RNA Cap Structure Analog is between 802.4 and 804.4 as determined by mass spectrometry analysis.	Pass
Functional Testing (Incorporation using RNA Polymerase) A 20 μ l reaction in RNA Polymerase Reaction Buffer in the presence of 4 mM NTPs +/- m7G(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.	Pass

This product has been tested and shown to be in compliance with all specifications.

Nancy Considine

Nancy Considine
Production Scientist
30 Aug 2019

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
30 Aug 2019