

## New England Biolabs Certificate of Analysis

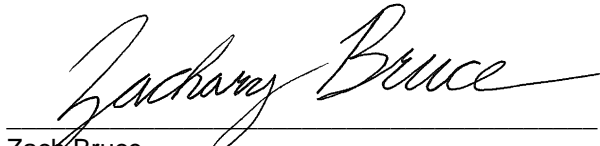
**Product Name:** *m7G(5')ppp(5')G RNA Cap Structure Analog*  
**Catalog Number:** *S1404L*  
**Packaging Lot Number:** *10267236*  
**Expiration Date:** *07/2027*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *Supplied as dried sodium salt.*  
**Specification Version:** *PS-S1404S/L v2.0*

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	10246130	Pass

Assay Name/Specification	Lot # 10267236
<b>Functional Testing (Incorporation using RNA Polymerase)</b> A 20 µl reaction in RNA Polymerase Reaction Buffer in the presence of 4 mM NTPs +/- m7G(5')ppp(5')G RNA Cap Structure Analog containing 2 µg 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
<b>Molecular Weight Determination (Mass Spectrometry)</b> 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
<b>Physical Purity (HPLC)</b> m7G(5')ppp(5')G RNA Cap Structure Analog is ≥ 95% pure as determined by HPLC analysis.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



---

Zachary Bruce  
Production Scientist  
31 Jul 2024



---

Josh Hersey  
Packaging Quality Control Inspector  
25 Nov 2024