

## New England Biolabs Certificate of Analysis

Product Name: *m7G(5')ppp(5')G RNA Cap Structure Analog*  
 Catalog Number: *S1404L*  
 Packaging Lot Number: *10222709*  
 Expiration Date: *11/2026*  
 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	10212894	Pass

Assay Name/Specification	Lot # 10222709
<p><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.</p>	Pass
<p><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.</p>	Pass
<p><b>Physical Purity (HPLC)</b>            m7G(5')ppp(5')G RNA Cap Structure Analog is ≥ 95% pure as determined by HPLC analysis.</p>	Pass


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

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29 Jan 2024



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Michael Tonello  
Packaging Quality Control Inspector  
29 Jan 2024