


## New England Biolabs Certificate of Analysis

Product Name: *m7G(5')ppp(5')G RNA Cap Structure Analog*  
 Catalog Number: *S1404S*  
 Packaging Lot Number: *10076470*  
 Expiration Date: *07/2023*  
 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	m <sup>7</sup> G(5')ppp(5')G RNA Cap Structure Analog	10076472	Pass

Assay Name/Specification	Lot # 10076470
<b>Molecular Weight Determination (Mass Spectrometry)</b> The molecular weight of m <sup>7</sup> G(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> m <sup>7</sup> G(5')ppp(5')G RNA Cap Structure Analog is ≥ 95% pure as determined by HPLC analysis.	Pass
<b>Functional Testing (Incorporation using RNA Polymerase)</b> A 20 µl reaction in RNA Polymerase Reaction Buffer in the presence of 4 mM NTPs +/- m <sup>7</sup> G(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

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

  
Michael Spfoviero  
Production Scientist  
23 Jul 2020

  
Josh Hersey  
Packaging Quality Control Inspector  
23 Jul 2020