


## New England Biolabs Certificate of Analysis

**Product Name:** *m7G(5')ppp(5')G RNA Cap Structure Analog*  
**Catalog Number:** *S1404L*  
**Packaging Lot Number:** *10076471*  
**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	m7G(5')ppp(5')G RNA Cap Structure Analog	10076472	Pass

Assay Name/Specification	Lot # 10076471
<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.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Physical Purity (HPLC)</b> m7G(5')ppp(5')G RNA Cap Structure Analog is ≥ 95% pure as determined by HPLC analysis.	<b>Pass</b>

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