

## New England Biolabs Certificate of Analysis

Product Name: 3'-O-Me-m<sup>7</sup>G(5')ppp(5')G RNA Cap Structure Analog  
 Catalog Number: S1411L  
 Packaging Lot Number: 10106614  
 Expiration Date: 04/2024  
 Storage Temperature: -20°C  
 Storage Conditions: Supplied as a lyophilized Sodium salt  
 Specification Version: PS-S1411S/L v1.0

3'-O-Me-m <sup>7</sup> G(5')ppp(5')G RNA Cap Structure Analog Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S1411SVIAL	3'-O-Me-m <sup>7</sup> G(5')ppp(5')G RNA Cap Structure Analog	10106616	Pass

Assay Name/Specification	Lot # 10106614
<b>Molecular Weight Determination (Mass Spectrometry)</b> The molecular weight of 3'-O-Me-m <sup>7</sup> G(5')ppp(5')G RNA Cap Structure Analog is between 815.46 and 817.46 as determined by mass spectrometry 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 +/- 3'-O-Me-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
<b>Physical Purity (HPLC)</b> 3'-O-Me-m <sup>7</sup> G(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.

*John L Buswell*

---

John Buswell  
Production Scientist  
03 May 2021

*Michael Tonello*

---

Michael Tonello  
Packaging Quality Control Inspector  
03 May 2021