

## 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: S1411S  
 Packaging Lot Number: 10076476  
 Expiration Date: 05/2023  
 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	10073042	Pass

Assay Name/Specification	Lot # 10076476
<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 +/- 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.</p>	Pass
<p><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.</p>	Pass
<p><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.</p>	Pass

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

*John L Buswell*

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John Buswell  
Production Scientist  
04 Jun 2020

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
04 Jun 2020