

## 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:** 10130711  
**Expiration Date:** 04/2024  
**Storage Temperature:** -20°C  
**Storage Conditions:** Supplied as dried sodium salt.  
**Specification Version:** PS-S1411S/L v2.0

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 # 10130711
<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
<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

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*

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John Buswell  
Production Scientist  
18 Jan 2022

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
18 Jan 2022