

## 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:** 10116717  
**Expiration Date:** 08/2024  
**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 | 10118135   | Pass                 |

| Assay Name/Specification   | Lot # 10116717 |
|--|----------------|
| <b>Functional Testing (Incorporation using RNA Polymerase)</b><br>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. | <b>Pass</b>    |
| <b>Molecular Weight Determination (Mass Spectrometry)</b><br>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.   | <b>Pass</b>    |
| <b>Physical Purity (HPLC)</b><br>3'-O-Me-m <sup>7</sup> G(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.

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 Aug 2021

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
18 Aug 2021