


## New England Biolabs Certificate of Analysis

Product Name: *m7G(5')ppp(5')G RNA Cap Structure Analog*  
 Catalog Number: *S1404S*  
 Packaging Lot Number: *10052564*  
 Expiration Date: *05/2022*  
 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 | 10042649   | Pass                 |

| Assay Name/Specification   | Lot # 10052564 |
|--|----------------|
| <p><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 +/- 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.</p> | Pass           |
| <p><b>Molecular Weight Determination (Mass Spectrometry)</b><br/>           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.</p>   | Pass           |
| <p><b>Physical Purity (HPLC)</b><br/>           m7G(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.



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Michael Spfoviero  
Production Scientist  
21 Nov 2019



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Michael Tonello  
Packaging Quality Control Inspector  
21 Nov 2019