

## New England Biolabs Certificate of Analysis

Product Name: *G(5')ppp(5') RNA Cap Structure Analog*  
 Catalog Number: *S1407S*  
 Lot Number: *10025797*  
 Expiration Date: *11/2021*  
 Storage Temperature: *-20°C*  
 Storage Conditions: *Supplied as a lyophilized Sodium salt*  
 Specification Version: *PS-S1407S/L v1.0*

<b>G(5')ppp(5') RNA Cap Structure Analog Component List</b>			
<b>NEB Part Number</b>	<b>Component Description</b>	<b>Lot Number</b>	<b>Individual QC Result</b>
S1407SVIAL	G(5')ppp(5')G RNA Cap Structure Analog	10030850	Pass

<b>Assay Name/Specification</b>	<b>Lot # 10025797</b>
<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 +/- 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 G(5')ppp(5')G RNA Cap Structure Analog is between 787.4 and 789.4 as determined by mass spectrometry analysis.</p>	Pass
<p><b>Physical Purity (HPLC)</b>            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.

*Nancy Considine*

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Nancy Considine  
Production Scientist  
28 Nov 2018

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
28 Nov 2018