

## New England Biolabs Certificate of Analysis

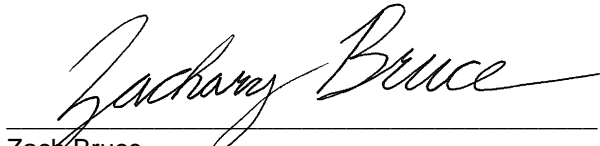
**Product Name:** *G(5')ppp(5')G RNA Cap Structure Analog*  
**Catalog Number:** *S1407S*  
**Packaging Lot Number:** *10265483*  
**Expiration Date:** *10/2025*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *Supplied as dried sodium salt.*  
**Specification Version:** *PS-S1407S/L v2.0*

<b>G(5')ppp(5')G 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	10164709	<b>Pass</b>

<b>Assay Name/Specification</b>	<b>Lot # 10265483</b>
<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.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Physical Purity (HPLC)</b> 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.

  
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28 Sep 2022

  
Josh Hersey  
Packaging Quality Control Inspector  
07 Nov 2024