

## New England Biolabs Certificate of Analysis

**Product Name:** *LAMP Fluorescent Dye*  
**Catalog Number:** *B1700S*  
**Concentration:** *50 X Concentrate*  
**Packaging Lot Number:** *10270568*  
**Expiration Date:** *11/2026*  
**Storage Temperature:** *-20°C*  
**Specification Version:** *PS-B1700S v1.0*  
**Composition (1X):** *Proprietary*

LAMP Fluorescent Dye Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B1700SVIAL	LAMP Fluorescent Dye	10267251	Pass

Assay Name/Specification	Lot # 10270568
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 2 µl of LAMP Fluorescent Dye incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Functional Testing (LAMP, Master Mix)</b> A 25 µl reaction with 1X WarmStart® LAMP Master Mix in the presence of 1X LAMP Primers containing 10 ng genomic DNA and 1X LAMP fluorescent dye results in a threshold time of ≤ 20 minutes as determined by fluorescent detection.	<b>Pass</b>
<b>Functional Testing (RT-LAMP, Master Mix)</b> A 25 µl reaction with 1X WarmStart® LAMP Master Mix in the presence of 1X LAMP Primers containing 10 ng of genomic RNA and 1X LAMP fluorescent dye results in a threshold time of ≤ 20 minutes as determined by fluorescent detection.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 2 µl of LAMP Fluorescent Dye incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>RNase Activity Assay (4 Hour Digestion)</b> A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA	<b>Pass</b>

Assay Name/Specification	Lot # 10270568
<p>and a minimum of 1 µl of LAMP Fluorescent Dye is incubated at 37°C. After incubation for 4 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p> <p><b>qPCR DNA Contamination (E. coli Genomic)</b> A minimum of 1 µl of LAMP Fluorescent Dye is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.</p>	<p><b>Pass</b></p>

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.



Trinh Nguyen  
Production Scientist  
27 Jan 2025



Michael Tonello  
Packaging Quality Control Inspector  
28 Jan 2025