

## New England Biolabs Certificate of Analysis

**Product Name:** LAMP Fluorescent Dye  
**Catalog Number:** B1700S  
**Concentration:** 50 X Concentrate  
**Packaging Lot Number:** 10170236  
**Expiration Date:** 09/2024  
**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	10163178	Pass

Assay Name/Specification	Lot # 10170236
<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>	<b>Pass</b>
<p><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 &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	<b>Pass</b>
<p><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.</p>	<b>Pass</b>
<p><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 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>	<b>Pass</b>

Assay Name/Specification	Lot # 10170236
<p><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.</p>	<b>Pass</b>
<p><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.</p>	<b>Pass</b>

This product has been tested and shown to be in compliance with all specifications.

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15 Sep 2022



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Packaging Quality Control Inspector  
09 Nov 2022