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## New England Biolabs Certificate of Analysis

Product Name: LAMP Fluorescent Dye

Catalog Number: B1700S

Concentration: 50 X Concentrate

Packaging Lot Number: 10174089
Expiration Date: 09/2024
Storage Temperature: -20°C

Specification Version: PS-B1700S v1.0
Composition (1X): Proprietary

LAMP Fluorescent Dye Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
B1700SVIAL	LAMP Fluorescent Dye	10163178	Pass	

Assay Name/Specification	Lot # 10174089
qPCR DNA Contamination (E. coli Genomic) 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.	Pass
Non-Specific DNase Activity (16 Hour) 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.	Pass
RNase Activity Assay (4 Hour Digestion) 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, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
Endonuclease Activity (Nicking) 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.	Pass



B1700S / Lot: 10174089

Page 1 of 2

Assay Name/Specification	Lot # 10174089
Functional Testing (LAMP, Master Mix) 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.	Pass
Functional Testing (RT-LAMP, Master Mix)  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	Pass

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 for additional information.

Trinh Nguyen **Production Scientist** 

15 Sep 2022

Michael Tonello

Packaging Quality Control Inspector

07 Dec 2022



B1700S / Lot: 10174089

Page 2 of 2