

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

LAMP Fluorescent Dye Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
B1700SVIAL	LAMP Fluorescent Dye	10221460	Pass	

Assay Name/Specification	Lot # 10242784
<b>Endonuclease Activity (Nicking)</b> A 50 $\mu$ I reaction in NEBuffer 2 containing 1 $\mu$ g of supercoiled PhiX174 DNA and a minimum of 2 $\mu$ I 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
<b>Functional Testing (LAMP, Master Mix)</b> A 25 $\mu$ I 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
<b>Functional Testing (RT-LAMP, Master Mix)</b> A 25 $\mu$ I 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 $\leq$ 20 minutes as determined by fluorescent detection.	Pass
<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.	Pass
<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	Pass





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Assay Name/Specification	Lot # 10242784
and a minimum of 1 $\mu$ I 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.	
<b>qPCR DNA Contamination (E. coli Genomic)</b> A minimum of 1 $\mu$ I 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 $\leq$ 1 E. coli genome.	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.

Lea Antonopoulos **Production** Scientist 14 Mar 2024

Josh Hersey

Packaging Quality Control Inspector 22 May 2024

