

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

Product Name: Luna® Probe One-Step RT-qPCR 4X Mix with UDG

Catalog Number: M3019G

Concentration: 4 X Concentrate

Packaging Lot Number: 10181654
Expiration Date: 02/2025
Storage Temperature: -20°C

Specification Version: PS-M3019G v2.0

Composition (1X): Proprietary

Luna® Probe One-Step RT-qPCR 4X Mix with UDG Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M3019SVIAL	Luna® Probe One-Step RT-qPCR 4X Mix with UDG	10179883	Pass	
B1502AVIAL	Nuclease-free Water	10170341	Pass	

Assay Name/Specification	Lot # 10181654
Functional Testing (One-Step RT-qPCR) Luna® Probe One-Step RT-qPCR 4X Mix with UDG is functionally tested in One-Step	Pass
RT-qPCR with human RNA template, resulting in a standard curve with a calculated qPCR efficiency of 90-110%, and a dynamic range of 8 orders of magnitude.	
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X Luna® Probe One-Step RT-qPCR Mix with UDG containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA 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 $\mu$ l reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 $\mu$ l of Luna® Probe One-Step RT-qPCR 4X Mix with UDG 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
qPCR DNA Contamination (E. coli Genomic) A minimum of 1 μl of Luna® Probe One-Step RT-qPCR 4X Mix with UDG is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for	Pass



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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.	

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

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Lea Antonpoulos

Production Scientist 03 Mar 2023 Michael Tonello

Packaging Quality Control Inspector

07 Mar 2023