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## New England Biolabs Certificate of Analysis

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

Catalog Number: M3019L

Concentration: 4 X Concentrate

Packaging Lot Number: 10170068
Expiration Date: 08/2023
Storage Temperature: -20°C

Specification Version: PS-M3019S/L/X v1.0

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 |  |
| M3019LVIAL  | Luna® Probe One-Step RT-qPCR 4X Mix with UDG | 10162129   | Pass                 |  |
| B1502AVIAL  | Nuclease-free Water                          | 10164121   | Pass                 |  |

| Assay Name/Specification   | Lot # 10170068 |
|--|----------------|
| 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           |
| Functional Testing (One-Step RT-qPCR) Luna® Probe One-Step RT-qPCR 4X Mix with UDG is functionally tested in One-Step 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.   | 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 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.

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 Antonpoulos

Production Scientist

31 Aug 2022

Michael Tonello

Packaging Quality Control Inspector

05 Dec 2022

