

be INSPIRED drive DISCOVERY stay GENUINE

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 (No ROX) |
|------------------------|---|
| Catalog Number:        | M3029S  |
| Concentration:         | 4 X Concentrate                                       |
| Packaging Lot Number:  | 10159691  |
| Expiration Date:       | 04/2023   |
| Storage Temperature:   | -20°C   |
| Specification Version: | PS-M3029S/L/E v1.0                                    |
| Composition (1X):      | Proprietary   |

| Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) Component List |  |            |                      |  |
|--|--|------------|----------------------|--|
| NEB Part Number  | Component Description                                | Lot Number | Individual QC Result |  |
| M3029SVIAL   | Luna Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) | 10147755   | Pass                 |  |
| B1502AVIAL   | Nuclease-free Water                                  | 10151182   | Pass                 |  |

| Assay Name/Specification   | Lot # 10159691 |
|--|----------------|
| <b>Functional Testing (One-Step RT-qPCR)</b><br>Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) is functionally tested in<br>one-step RT-qPCR with human RNA template, resulting in a standard curve with a<br>calculated qPCR efficiency of 90-110%, and a dynamic range of 8 orders of magnitude.  | Pass           |
| <b>qPCR DNA Contamination (E. coli Genomic)</b><br>A minimum of 1 $\mu$ l of Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) is<br>screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers<br>specific for the E. coli 16S rRNA locus. Results are quantified using a standard<br>curve generated from purified E. coli genomic DNA. The measured level of E. coli<br>genomic DNA contamination is $\leq$ 1 E. coli genome. | Pass           |
| <b>RNase Activity (Extended Digestion)</b><br>A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA<br>and a minimum of 1 µl of Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) is<br>incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains<br>intact as determined by gel electrophoresis using fluorescent detection.   | Pass           |
| Non-Specific DNase Activity (16 hour, Buffer)<br>A 50 µl reaction in 1X Luna® Probe One-Step RT-qPCR Mix with UDG (No ROX) containing  | Pass           |





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| Assay Name/Specification   | Lot # 10159691 |
|--|----------------|
| 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.  |                |

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.

vaistie Vayanez

Christie Vazquez Production Scientist 11 Aug 2022

Michae

Michael Tonello Packaging Quality Control Inspector 11 Aug 2022

