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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® Universal qPCR Master Mix |
|------------------------|---------------------------------|
| Catalog Number:        | M3003L                          |
| Concentration:         | 2 X Concentrate                 |
| Packaging Lot Number:  | 10120985                        |
| Expiration Date:       | 03/2023                         |
| Storage Temperature:   | -20°C                           |
| Specification Version: | PS-M3003S/L/G/X/E v2.0          |
| Composition (1X):      | Proprietary                     |

| Luna® Universal qPCR Master Mix Component List |                                 |            |                      |  |
|--|---------------------------------|------------|----------------------|--|
| <b>NEB Part Number</b>                         | Component Description           | Lot Number | Individual QC Result |  |
| M3003SVIAL                                     | Luna® Universal qPCR Master Mix | 10102380   | Pass                 |  |

| Assay Name/Specification   | Lot # 10120985 |
|--|----------------|
| <b>Non-Specific DNase Activity (16 hour, Master Mix)</b><br>A 50 µl reaction in 1X Luna® Universal qPCR Master Mix containing 1 µg of T3 or T7<br>DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours<br>at 37°C results in a DNA pattern free of detectable nuclease degradation as<br>determined by agarose gel electrophoresis.  | Pass           |
| <b>RNase Activity Assay (4 Hour 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® Universal qPCR Master Mix is incubated at 37°C.<br>After incubation for 4 hours, >90% of the substrate RNA remains intact as determined<br>by gel electrophoresis using fluorescent detection.   | Pass           |
| <b>qPCR DNA Contamination (E. coli Genomic)</b><br>A minimum of 1 $\mu$ I of Luna® Universal qPCR Master Mix 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           |
| <b>Functional Testing (qPCR)</b><br>Luna® Universal qPCR Master Mix is functionally tested in qPCR with human cDNA<br>template, resulting in a standard curve with a calculated qPCR efficiency of<br>90-110%, and a dynamic range of 5 orders of magnitude.   | Pass           |





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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.

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Christie Vazquez Production Scientist 27 Sep 2021

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Michael Tonello Packaging Quality Control Inspector 27 Sep 2021

