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## New England Biolabs Certificate of Analysis

Product Name: Luna® Universal Probe qPCR Master Mix

Catalog Number: M3004X

Concentration: 2 X Concentrate

Lot Number: 10033570
Expiration Date: 09/2020
Storage Temperature: -20°C

Specification Version: PS-M3004S/L/G/X/E v1.0

Composition (1X): Proprietary

| Luna® Universal Probe qPCR Master Mix Component List |                                       |            |                      |  |
|------------------------------------------------------|---------------------------------------|------------|----------------------|--|
| <b>NEB Part Number</b>                               | Component Description                 | Lot Number | Individual QC Result |  |
| M3004L                                               | Luna® Universal Probe qPCR Master Mix | 10029423   | Pass                 |  |

| Assay Name/Specification                                                                                                                                                                                                                                                                                                                                                                                              | Lot # 10033570 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Non-Specific DNase Activity (16 hour, Master Mix) A 50 µl reaction in 1X Luna® Universal Probe qPCR Master Mix containing 1 µg of T3 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 (qPCR) Luna® Universal Probe qPCR Master Mix is functionally tested in qPCR with human cDNA template, resulting in a standard curve with a calculated qPCR efficiency of 90-110%, and a dynamic range of 5 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® Universal Probe qPCR Master Mix 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           |
| <b>qPCR DNA Contamination (E. coli Genomic)</b> A minimum of 1 μl of Luna® Universal Probe 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 ≤ 1 E. coli genome. | Pass           |



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

Christie Vazquez Production Scientist

02 Jan 2019

Michael To

Michael Tonello Packaging Quality Control Inspector 02 Jan 2019