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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: 10041840
Expiration Date: 12/2020
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 | 10036689   | Pass                 |

| Assay Name/Specification  | Lot # 10041840 |
|---|----------------|
| 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           |
| <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           |
| 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           |



M3004X / Lot: 10041840

Page 1 of 2



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

Christie Vazquez Production Scientist

24 Apr 2019

Michael Tonello

Packaging Quality Control Inspector

24 Apr 2019