Product Name: **Luna® Universal qPCR Master Mix**
Catalog Number: **M3003E**
Concentration: **2 X Concentrate**
Packaging Lot Number: **10151823**
Expiration Date: **03/2024**
Storage Temperature: **-20°C**
Specification Version: **PS-M3003G/E v1.0**
Composition (1X): **Proprietary**

### Luna® Universal qPCR Master Mix Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3003EVIAL</td>
<td>Luna® Universal qPCR Master Mix</td>
<td>10135649</td>
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</tr>
</tbody>
</table>

### Assay Name/Specification

**Non-Specific DNase Activity (16 hour, Master Mix)**
A 50 µl reaction in 1X Luna® Universal qPCR Master Mix 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.

**qPCR DNA Contamination (E. coli Genomic)**
A minimum of 1 µl 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 ≤ 1 E. coli genome.

**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 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.

**Functional Testing (qPCR)**
Luna® Universal 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.

**Lot # 10151823**

- Pass
- Pass
- Pass
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.

Christie Vazquez
Production Scientist
18 May 2022

Michael Tonello
Packaging Quality Control Inspector
18 May 2022