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## New England Biolabs Certificate of Analysis

Product Name: Luna® Universal qPCR Master Mix

Catalog Number: M3003X

Concentration: 2 X Concentrate

Packaging Lot Number: 10142173
Expiration Date: 12/2023
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
M3003L	Luna® Universal qPCR Master Mix	10141467	Pass

Assay Name/Specification	Lot # 10142173
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.	Pass
<b>qPCR DNA Contamination (E. coli Genomic)</b> 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.	Pass
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.	Pass
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.	Pass



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

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Christie Vazquez Production Scientist 07 Mar 2022 Michael Tonello

Packaging Quality Control Inspector

07 Mar 2022