

be INSPIRED drive DISCOVERY stay GENUINE

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:	M3003E
Concentration:	2 X Concentrate
Lot Number:	10050613
Expiration Date:	06/2021
Storage Temperature:	-20°C
Specification Version:	PS-M3003S/L/G/X/E v1.0
Composition (1X):	Proprietary

Luna® Universal qPCR Master Mix Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M3003EVIAL	Luna® Universal qPCR Master Mix	10045638	Pass	

Assay Name/Specification	Lot # 10050613
<b>RNase Activity Assay (4 Hour Digestion)</b> 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 $\mu$ l 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> 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
<b>Non-Specific DNase Activity (16 hour, Master Mix)</b> A 50 µl reaction in 1X Luna® Universal 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





be INSPIRED drive DISCOVERY stay GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

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

vaistie Vayquez

Christie Vazquez Production Scientist 17 Jun 2019

Mid 711.

Michael Tonello Packaging Quality Control Inspector 06 Aug 2019

