

## New England Biolabs Certificate of Analysis

**Product Name:** Luna<sup>®</sup> Probe One-Step RT-qPCR 4X Mix with UDG  
**Catalog Number:** M3019E  
**Concentration:** 4 X Concentrate  
**Packaging Lot Number:** 10122640  
**Expiration Date:** 07/2022  
**Storage Temperature:** -20°C  
**Specification Version:** PS-M3019E v1.0  
**Composition (1X):** Proprietary

Luna <sup>®</sup> Probe One-Step RT-qPCR 4X Mix with UDG Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M3019EVIAL	Luna <sup>®</sup> Probe One-Step RT-qPCR 4X Mix with UDG	10115027	Pass
B1502EVIAL	Nuclease-free Water	10083035	Pass

Assay Name/Specification	Lot # 10122640
<b>qPCR DNA Contamination (E. coli Genomic)</b> A minimum of 1 µl of Luna <sup>®</sup> Probe One-Step RT-qPCR 4X Mix with UDG is screened for the presence of E. coli genomic DNA using SYBR <sup>®</sup> 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
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X Luna <sup>®</sup> Probe One-Step RT-qPCR Mix with UDG 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
<b>Functional Testing (One-Step RT-qPCR)</b> Luna <sup>®</sup> Probe One-Step RT-qPCR 4X Mix with UDG is functionally tested in One-Step RT-qPCR with human RNA template, resulting in a standard curve with a calculated qPCR efficiency of 90-110%, and a dynamic range of 8 orders of magnitude.	Pass
<b>RNase Activity Assay (4 Hour Digestion)</b>	Pass

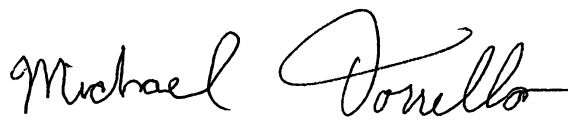
Assay Name/Specification	Lot # 10122640
A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Luna® Probe One-Step RT-qPCR 4X Mix with UDG is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	

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](http://www.neb.com/trademarks) for additional information.



Christie Vazquez  
Production Scientist  
20 Sep 2021



Michael Tonello  
Packaging Quality Control Inspector  
20 Sep 2021