

## New England Biolabs Certificate of Analysis

**Product Name:** Luna® Probe One-Step RT-qPCR 4X Mix with UDG  
**Catalog Number:** M3019X  
**Concentration:** 4 X Concentrate  
**Packaging Lot Number:** 10145816  
**Expiration Date:** 01/2023  
**Storage Temperature:** -20°C  
**Specification Version:** PS-M3019S/L/X v1.0  
**Composition (1X):** Proprietary

Luna® Probe One-Step RT-qPCR 4X Mix with UDG Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M3019LVIAL	Luna® Probe One-Step RT-qPCR 4X Mix with UDG	10135892	Pass
B1502AVIAL	Nuclease-free Water	10137924	Pass

Assay Name/Specification	Lot # 10145816
<b>qPCR DNA Contamination (E. coli Genomic)</b> A minimum of 1 µl of Luna® Probe One-Step RT-qPCR 4X Mix with UDG 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
<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® 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.	Pass
<b>Functional Testing (One-Step RT-qPCR)</b> Luna® 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>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X Luna® Probe One-Step RT-qPCR Mix with UDG containing 1 µg of	Pass

Assay Name/Specification	Lot # 10145816
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.	

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.



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24 Mar 2022



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