

## New England Biolabs Certificate of Analysis

Product Name: Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX)  
 Catalog Number: M3029L  
 Concentration: 4 X Concentrate  
 Packaging Lot Number: 10159786  
 Expiration Date: 10/2023  
 Storage Temperature: -20°C  
 Specification Version: PS-M3029S/L/E v1.0  
 Composition (1X): Proprietary

Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M3029LVIAL	Luna Probe One-Step RT-qPCR 4X Mix with UDG (No ROX)	10164945	Pass
B1502AVIAL	Nuclease-free Water	10154305	Pass

Assay Name/Specification	Lot # 10159786
<p><b>Functional Testing (One-Step RT-qPCR)</b>            Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) 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.</p>	Pass
<p><b>qPCR DNA Contamination (E. coli Genomic)</b>            A minimum of 1 µl of Luna® Probe One-Step RT-qPCR 4X Mix with UDG (No ROX) 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.</p>	Pass
<p><b>RNase Activity (Extended 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 (No ROX) is incubated at 37°C. After incubation for 4 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p><b>Non-Specific DNase Activity (16 hour, Buffer)</b>            A 50 µl reaction in 1X Luna® Probe One-Step RT-qPCR Mix with UDG (No ROX) containing</p>	Pass

Assay Name/Specification	Lot # 10159786
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.	

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

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Production Scientist  
06 Oct 2022



Josh Hersey  
Packaging Quality Control Inspector  
13 Oct 2022