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## New England Biolabs Certificate of Analysis

Product Name: SARS-CoV-2 LAMP Primer Mix (N/E)

Catalog Number: \$1883\$

Concentration: 10 X Concentrate

Packaging Lot Number: 10140417
Expiration Date: 09/2023
Storage Temperature: -20°C

Specification Version: PS-S1883S v1.0
Composition (1X): Proprietary

| SARS-CoV-2 LAMP Primer Mix (N/E) Component List |                                  |            |                      |  |
|---|----------------------------------|------------|----------------------|--|
| <b>NEB Part Number</b>                          | Component Description            | Lot Number | Individual QC Result |  |
| S1883AVIAL                                      | SARS-CoV-2 LAMP Primer Mix (N/E) | 10122085   | Pass                 |  |

| Assay Name/Specification   | Lot # 10140417 |
|--|----------------|
| Functional Testing (RT-LAMP, SARS-CoV-2) A 25 μl reaction in 1X WarmStart® LAMP Master Mix with UDG in the presence of LAMP Fluorescent Dye and 1X SARS-CoV-2 LAMP Primer Mix (N/E) containing 500 copies of synthetic SARS-CoV-2 RNA results in a threshold time of ≤ 20 minutes as determined by fluorescent detection. Reactions that lack SARS-CoV-2 RNA template remain negative over a 30 minute incubation at 65°C. | Pass           |
| Endonuclease Activity (Nicking) A 50 $\mu$ I reaction in NEBuffer 2 containing 1 $\mu$ g of supercoiled PhiX174 DNA and a minimum of 5 $\mu$ I of SARS-CoV-2 LAMP Primer Mix (N/E) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.   | Pass           |
| Phosphatase Activity (pNPP) A 200 μl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl2 containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 20 μl of SARS-CoV-2 LAMP Primer Mix (N/E) incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.  | Pass           |
| RNase Activity (Extended 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 SARS-CoV-2 LAMP Primer Mix (N/E) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as   | Pass           |



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| Assay Name/Specification   | Lot # 10140417 |
|--|----------------|
| determined by gel electrophoresis using fluorescent detection.                   |                |
| Non-Specific DNase Activity (16 Hour)  | Pass           |
| A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 or T7 DNA in addition to a  |                |
| reaction containing Lambda-HindIII DNA and a minimum of 5 µl of SARS-CoV-2 LAMP  |                |
| Primer Mix (N/E) 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 for additional information.

histie Vazguez Christie Vazquez **Production Scientist** 

15 Feb 2022

15 Feb 2022

Josh Hersey Packaging Ou ality Control Inspector



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