NEW ENGLAND BioLabs Inc.
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:* | *PhiX174 Virion DNA* |
| *Catalog Number:* | *N3023L* |
| *Concentration:* | *1,000 µg/ml* |
| *Unit Definition:* | *N/A* |
| *Packaging Lot Number:* | *10147355* |
| *Expiration Date:* | *04/2024* |
| *Storage Temperature:* | *-20°C* |
| *Storage Conditions:* | *10 mM Tris-HCl (pH 8.0), 1 mM EDTA* |
| *Specification Version:* | *PS-N3023S/L v1.0* |

| **PhiX174 Virion DNA Component List** | | | |
|---|---|---|---|
| **NEB Part Number** | **Component Description** | **Lot Number** | **Individual QC Result** |
| N3023LVIAL | PhiX174 Virion DNA | 10147356 | **Pass** |

| **Assay Name/Specification** | **Lot # 10147355** |
|---|---|
| **Restriction Digest (Single Stranded, Resistant)**<br>A 50 µl reaction in CutSmart™ Buffer containing 5 µg of ϕX174 Virion DNA and a minimum of 20 units of XhoI incubated for 1 hour at 37°C results in no detectable digestion of the DNA as determined by agarose gel electrophoresis. | **Pass** |
| **Non-Specific DNase Activity (DNA, 16 hour)**<br>A 50 µl reaction in 1X NEBuffer 2 containing 5 µg of ϕX174 Virion DNA incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | **Pass** |
| **Mung Bean Nuclease Digest (Sensitive)**<br>A 100 µl reaction in Mung Bean Nuclease Reaction Buffer containing 5 µg of ϕX174 Virion DNA and 10 units of Mung Bean Nuclease incubated for 1 hour at 30°C results in complete digestion of the DNA as determined by agarose gel electrophoresis. | **Pass** |
| **A260/A280 Assay**<br>The ratio of UV absorption of ϕX174 Virion DNA at 260 and 280 nm is between 1.8 and 2.0. | **Pass** |
| **DNA Concentration (A260)**<br>The concentration of ϕX174 Virion DNA is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm. | **Pass** |

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| Assay Name/Specification | Lot # 10147355 |
|---|---|
| **Electrophoretic Pattern (Plasmid)**<br>The banding pattern of ϕX174 Virion DNA on a 1.2% agarose gel is evaluated against a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide. | **Pass** |

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.

Vanessa Mathieu-Sheltry
Production Scientist
08 Apr 2022

Michael Tonello
Packaging Quality Control Inspector
08 Apr 2022