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New England Biolabs Certificate of Analysis

Product Name: PhiX174 Virion DNA

Catalog Number: N3023S
Concentration: 1,000 µg/ml

Unit Definition: N/A

Packaging Lot Number: 10150026
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	
N3023SVIAL	PhiX174 Virion DNA	10147357	Pass	

Assay Name/Specification	Lot # 10150026
Restriction Digest (Single Stranded, Resistant) A 50 µl reaction in CutSmart™ Buffer containing 5 µg of \$\psi X174\$ Virion DNA and a minimum of 20 units of Xhol 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) A 50 μl reaction in 1X NEBuffer 2 containing 5 μg of φX174 Virion 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
Mung Bean Nuclease Digest (Sensitive) 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 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) 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 # 10150026
Electrophoretic Pattern (Plasmid) 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

22 Apr 2022

Erin Varney

Packaging Quality Control Inspector

22 Apr 2022



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