

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: *10164654*
Expiration Date: *09/2024*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*
Specification Version: *PS-N3023S/L v1.0*

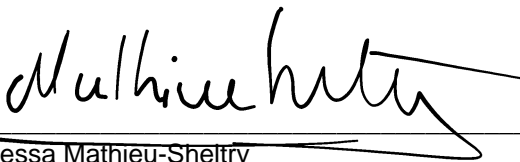
PhiX174 Virion DNA Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3023LVIAL	PhiX174 Virion DNA	10164653	Pass

Assay Name/Specification	Lot # 10164654
Restriction Digest (Single Stranded, Resistant) 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) 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
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
DNA Concentration (A260) The concentration of φX174 Virion DNA is between 1000 and 1050 µg/ml as determined	Pass

Assay Name/Specification	Lot # 10164654
<p>by UV absorption at 260 nm.</p> <p>A260/A280 Assay The ratio of UV absorption of ϕX174 Virion DNA at 260 and 280 nm is between 1.8 and 2.0.</p>	<p>Pass</p>

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

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Vanessa Mathieu-Sheltry
Production Scientist
15 Sep 2022



Michael Tonello
Packaging Quality Control Inspector
02 Nov 2022