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New England Biolabs Certificate of Analysis

Product Name: PhiX174 RF I DNA

Catalog Number: N3021L
Concentration: 1,000 µg/ml

Unit Definition: N/A

Packaging Lot Number: 10100834
Expiration Date: 03/2023
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl (pH 8.0), 1 mM EDTA

Specification Version: PS-N3021S/L v1.0

PhiX174 RF I DNA Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3021LVIAL	PhiX174 RF I DNA	10100833	Pass

Assay Name/Specification	Lot # 10100834
Restriction Digest (Linearization) A 50 µl reaction in CutSmart™ Buffer containing 5 µg of \$\phi\$X174 RF I DNA and 20 units of Xhol incubated for 1 hour at 37°C produces > 95% linearization resulting in a single band of approximately 5386 bp 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 \$\phi\$X174 RF I 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
A260/A280 Assay The ratio of UV absorption of φX174 RF I DNA at 260 and 280 nm is between 1.8 and 2.0.	Pass
Electrophoretic Pattern (Plasmid) The banding pattern of φX174 RF I 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 RF I DNA is between 1000 and 1050 μg/ml as determined by UV absorption at 260 nm.	Pass



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

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Production Scientist

10 Mar 2021

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Packaging Quality Control Inspector

10 Mar 2021