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New England Biolabs Certificate of Analysis

Product Name: PhiX174 RF I DNA

Catalog Number: N3021S
Concentration: 1,000 µg/ml

Unit Definition: N/A

Packaging Lot Number: 10161038
Expiration Date: 08/2024
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	
N3021SVIAL	PhiX174 RF I DNA	10161037	Pass	

Assay Name/Specification	Lot # 10161038
Restriction Digest (Linearization) A 50 μl reaction in CutSmart™ Buffer containing 5 μg of φX174 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 φX174 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
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
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



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

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Vanessa Mathieu-Sheltry Production Scientist

11 Aug 2022

Erin Varney

Packaging Quality Control Inspector

11 Aug 2022



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