

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: *10207552*
Expiration Date: *08/2025*
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	10201518	Pass

Assay Name/Specification	Lot # 10207552
A260/A280 Assay The ratio of UV absorption of ϕ X174 RF I DNA at 260 and 280 nm is between 1.8 and 2.0.	Pass
DNA Concentration (A260) The concentration of ϕ X174 RF I DNA is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm.	Pass
Electrophoretic Pattern (Plasmid) The banding pattern of ϕ X174 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
Non-Specific DNase Activity (DNA, 16 hour) A 50 µl reaction in 1X NEBuffer 2 containing 5 µg of ϕ 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
Restriction Digest (Linearization) A 50 µl reaction in CutSmart™ Buffer containing 5 µg of ϕ X174 RF I DNA and 20 units of XhoI 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

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

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Production Scientist
24 Aug 2023



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27 Sep 2023