

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: *10228152*
Expiration Date: *03/2026*
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	10235103	Pass

Assay Name/Specification	Lot # 10228152
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.

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.



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Production Scientist
12 Mar 2024



Michael Tonello
Packaging Quality Control Inspector
07 May 2024