

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: *10161040*
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 |
| N3021LVIAL | PhiX174 RF I DNA | 10161039 | Pass |

| Assay Name/Specification | Lot # 10161040 |
|--|----------------|
| 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 |
| Restriction Digest (Linearization) A 50 µl reaction in CutSmart™ Buffer containing 5 µg of ϕX174 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 |
| 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 |
| 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 |

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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08 Sep 2022



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