

## New England Biolabs Certificate of Analysis

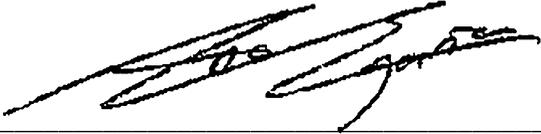
**Product Name:** PhiX174 RF II DNA  
**Catalog Number:** N3022L  
**Concentration:** 1,000 µg/ml  
**Unit Definition:** N/A  
**Packaging Lot Number:** 10098287  
**Expiration Date:** 01/2023  
**Storage Temperature:** -20°C  
**Storage Conditions:** 10 mM Tris-HCl (pH 8.0), 1 mM EDTA  
**Specification Version:** PS-N3022S/L v1.0

PhiX174 RF II DNA Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3022LVIAL	PhiX174 RF II DNA	10098288	Pass

Assay Name/Specification	Lot # 10098287
<b>A260/A280 Assay</b> The ratio of UV absorption of φX174 RF II DNA at 260 and 280 nm is between 1.8 and 2.0.	Pass
<b>DNA Concentration (A260)</b> The concentration of φX174 RF II DNA is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm.	Pass
<b>Electrophoretic Pattern (Plasmid)</b> The banding pattern of φX174 RF II 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
<b>Non-Specific DNase Activity (DNA, 16 hour)</b> A 50 µl reaction in 1X NEBuffer 2 containing 5 µg of φX174 RF II 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
<b>Restriction Digest (Linearization)</b> A 50 µl reaction in CutSmart™ Buffer containing 5 µg of φX174 RF II 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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29 Jan 2021



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