Product Name: PhiX174 RF I DNA
Catalog Number: N3021L
Concentration: 1,000 µg/ml
Unit Definition: N/A
Packaging Lot Number: 10100834
Expiration Date: 03/2023
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

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>N3021LVIAL</td>
<td>PhiX174 RF I DNA</td>
<td>10100833</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification

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.

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.

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.

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.

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.
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.

Ana Egana
Production Scientist
10 Mar 2021

Michael Tonello
Packaging Quality Control Inspector
10 Mar 2021