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>
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<tbody>
<tr>
<td>N3021SVIAL</td>
<td>PhiX174 RF I DNA</td>
<td>10161037</td>
<td>Pass</td>
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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 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.

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.

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.

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

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11 Aug 2022

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11 Aug 2022