240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: ΦX174 RF I DNA

Catalog #: N3021S/L
Concentration: 1,000 µg/ml

 Unit Definition:
 N/A

 Lot #:
 1771407

 Assay Date:
 07/2014

 Expiration Date:
 07/2016

 Storage Temp:
 -20 °C

Storage Conditions: 10 mM Tris-HCl (pH 8.0), 1 mM EDTA

Specification Version: PS-N3021S/L v1.0
Effective Date: 08 Jul 2014

Assay Name/Specification (minimum release criteria)	Lot #1771407
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 Φ X174 RF I DNA is between 1000 and 1050 μ g/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 μ l reaction in 1X NEBuffer 2 containing 5 μ g 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 TM 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

Authorized by Derek Robinson 08 Jul 2014







Inspected by Vanessa Mathieu-Sheltry 02 Jul 2014