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New England Biolabs Certificate of Analysis

Product Name:	ΦX174 RF I DNA
Catalog #:	N3021S/L
Concentration:	1,000 µg/ml
Unit Definition:	N/A
<i>Lot</i> #:	1791707
Assay Date:	07/2017
Expiration Date:	7/2019
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:	23 Jan 2017

Assay Name/Specification (minimum release criteria)	Lot #1791707
A260/A280 Assay - The ratio of UV absorption of Φ X174 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 µg/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 μ l reaction in CutSmart TM Buffer containing 5 μ g of Φ X174 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

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Authorized by Derek Robinson 23 Jan 2017



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Inspected by Vanessa Mathieu-Sheltry 26 Jul 2017