

New England Biolabs Product Specification

Product Name: Lambda DNA (N6-methyladenine-free)
Catalog #: N3013S/L
Concentration: 500 µg/ml
Unit Definition: N/A
Shelf Life: 24 months
Storage Temp: -20°C
Storage Conditions: 10 mM Tris-HCl (pH 8.0), 1 mM EDTA
Specification Version: PS-N3013S/L v1.0
Effective Date: 14 Jul 2014

Assay Name/Specification (minimum release criteria)

A260/A280 Assay - The ratio of UV absorption of Lambda DNA (N6-methyladenine-free) at 260 and 280 nm is between 1.8 and 2.0.

DNA Concentration (A260) - The concentration of Lambda DNA (N6-methyladenine-free) is between 500 and 550 µg/ml as determined by UV absorption at 260 nm.

Electrophoretic Pattern (Linear DNA) - The banding pattern of Lambda DNA (N6-methyladenine-free) 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.

Non-Specific DNase Activity (DNA, 16 hour) - A 50 µl reaction in 1X NEBuffer 2 containing 2.5 µg of Lambda DNA (N6-methyladenine-free) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

Restriction Digest (Correct Pattern) - A 50 µl reaction in NEBuffer 2.1 containing 2.5 µg of Lambda DNA (N6-methyladenine-free) DNA and 20 units of HindIII incubated for 1 hour at 37°C produces the expected pattern of DNA fragments as determined by agarose gel electrophoresis.

Restriction Digest (Dam Resistant) - A 50 µl reaction in CutSmart™ Buffer containing 2.5 µg of Lambda DNA (N6-methyladenine-free) and a minimum of 20 units of DpnI incubated for 1 hour at 37°C results in no detectable digestion of the DNA as determined by agarose gel electrophoresis.

Restriction Digest (Dam Sensitive) - A 50 µl reaction in NEBuffer DpnII containing 2.5 µg of Lambda DNA (N6-methyladenine-free) DNA and a minimum of 10 units of DpnII incubated for 1 hour at 37°C results in complete digestion of the DNA as determined by agarose gel electrophoresis.



Derek Robinson
Director of Quality Control

Date 14 Jul 2014

