

New England Biolabs Certificate of Analysis

Product Name: *Lambda DNA (N⁶-methyladenine-free)*
Catalog Number: *N3013L*
Concentration: *500 µg/ml*
Unit Definition: *N/A*
Lot Number: *10032407*
Expiration Date: *12/2020*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*
Specification Version: *PS-N3013S/L v1.0*

Lambda DNA (N ⁶ -methyladenine-free) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3013LVIAL	Lambda DNA (N ⁶ -methyladenine-free)	10032419	Pass

Assay Name/Specification	Lot # 10032407
Restriction Digest (Dam Resistant) A 50 µl reaction in CutSmart™ Buffer containing 2.5 µg of Lambda DNA (N ⁶ -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.	Pass
Restriction Digest (Dam Sensitive) A 50 µl reaction in NEBuffer DpnII containing 2.5 µg of Lambda DNA (N ⁶ -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.	Pass
A260/A280 Assay The ratio of UV absorption of Lambda DNA (N ⁶ -methyladenine-free) at 260 and 280 nm is between 1.8 and 2.0.	Pass
DNA Concentration (A260) The concentration of Lambda DNA (N ⁶ -methyladenine-free) is between 500 and 550 µg/ml as determined by UV absorption at 260 nm.	Pass
Electrophoretic Pattern (Linear DNA) The banding pattern of Lambda DNA (N ⁶ -methyladenine-free) on a 1.2% agarose gel is	Pass

Assay Name/Specification	Lot # 10032407
<p>evaluated against a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide.</p> <p>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.</p> <p>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.</p>	<p style="text-align: center;">Pass</p> <p style="text-align: center;">Pass</p>

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



Vanessa Mathieu-Sheltry
Production Scientist
19 Dec 2018



Michael Tonello
Packaging Quality Control Inspector
07 Jan 2019