

## New England Biolabs Certificate of Analysis

**Product Name:** *Lambda DNA (N6-methyladenine-free)*  
**Catalog Number:** *N3013S*  
**Concentration:** *500 µg/ml*  
**Unit Definition:** *N/A*  
**Packaging Lot Number:** *10058088*  
**Expiration Date:** *09/2021*  
**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 (N6-methyladenine-free) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3013SVIAL	Lambda DNA (N6-methyladenine-free)	10055064	Pass

Assay Name/Specification	Lot # 10058088
<b>Restriction Digest (Dam Resistant)</b> 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.	<b>Pass</b>
<b>Restriction Digest (Dam Sensitive)</b> 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.	<b>Pass</b>
<b>Restriction Digest (Correct Pattern)</b> 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.	<b>Pass</b>
<b>Non-Specific DNase Activity (DNA, 16 hour)</b> 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.	<b>Pass</b>

Assay Name/Specification	Lot # 10058088
<p><b>DNA Concentration (A260)</b> The concentration of Lambda DNA (N6-methyladenine-free) is between 500 and 550 µg/ml as determined by UV absorption at 260 nm.</p>	<b>Pass</b>
<p><b>Electrophoretic Pattern (Linear DNA)</b> 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.</p>	<b>Pass</b>
<p><b>A260/A280 Assay</b> The ratio of UV absorption of Lambda DNA (N6-methyladenine-free) at 260 and 280 nm is between 1.8 and 2.0.</p>	<b>Pass</b>

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



Vanessa Mathieu-Sheltry  
Production Scientist  
12 Sep 2019



Michael Tonello  
Packaging Quality Control Inspector  
02 Jan 2020