

## New England Biolabs Certificate of Analysis

**Product Name:** *Lambda DNA (N6-methyladenine-free)*  
**Catalog #:** *N3013S/L*  
**Concentration:** *500 µg/ml*  
**Unit Definition:** *N/A*  
**Lot #:** *0481407*  
**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-N3013S/L v1.0*  
**Effective Date:** *14 Jul 2014*

Assay Name/Specification (minimum release criteria)	Lot #0481407
<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.	<b>Pass</b>
<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.	<b>Pass</b>
<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.	<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>
<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>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>



Authorized by  
Derek Robinson  
14 Jul 2014



Inspected by  
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23 Jul 2014

