

## New England Biolabs Certificate of Analysis

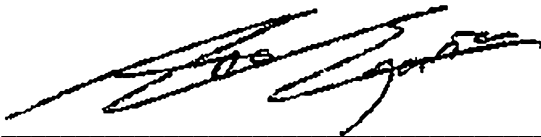
**Product Name:** *Lambda DNA (dam-)*  
**Catalog Number:** *N3013L*  
**Concentration:** *500 µg/ml*  
**Unit Definition:** *N/A*  
**Packaging Lot Number:** *10071277*  
**Expiration Date:** *04/2022*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*  
**Specification Version:** *PS-N3013S/L v2.0*

Lambda DNA (dam-) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3013LVIAL	Lambda DNA (dam-)	10071276	Pass


Assay Name/Specification	Lot # 10071277
<b>Restriction Digest (Dam Sensitive)</b> A 50 µl reaction in NEBuffer DpnII containing 2.5 µg of Lambda DNA (dam-) 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 (Dam Resistant)</b> A 50 µl reaction in CutSmart™ Buffer containing 2.5 µg of Lambda DNA (dam-) 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 (Correct Pattern)</b> A 50 µl reaction in NEBuffer 2.1 containing 2.5 µg of Lambda DNA (dam-) 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 (dam-) 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>Electrophoretic Pattern (Linear DNA)</b> The banding pattern of Lambda DNA (dam-) on a 1.2% agarose gel is evaluated against	<b>Pass</b>

Assay Name/Specification	Lot # 10071277
a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide.	
<p><b>DNA Concentration (A260)</b> The concentration of Lambda DNA (dam-) is between 500 and 550 µg/ml as determined by UV absorption at 260 nm.</p>	<b>Pass</b>
<p><b>A260/A280 Assay</b> The ratio of UV absorption of Lambda DNA (dam-) 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.



Ana Egana  
Production Scientist  
15 May 2020



Jay Minichiello  
Packaging Quality Control Inspector  
15 May 2020