

## New England Biolabs Certificate of Analysis

**Product Name:** *Lambda DNA*  
**Catalog #:** *N3011S/L*  
**Concentration:** *500 µg/ml*  
**Unit Definition:** *N/A*  
**Lot #:** *166*  
**Assay Date:** *05/2016*  
**Expiration Date:** *05/2018*  
**Storage Temp:** *-20°C*  
**Storage Conditions:** *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*  
**Specification Version:** *PS-N3011S/L v2.0*  
**Effective Date:** *03 May 2016*

| Assay Name/Specification (minimum release criteria)   | Lot #166    |
|---|-------------|
| <b>A260/A280 Assay</b> - The ratio of UV absorption of Lambda DNA 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 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 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 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 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> |



Authorized by  
Derek Robinson  
03 May 2016



Inspected by  
Vanessa Mathieu-Sheltry  
18 Jul 2017

