

## New England Biolabs Certificate of Analysis

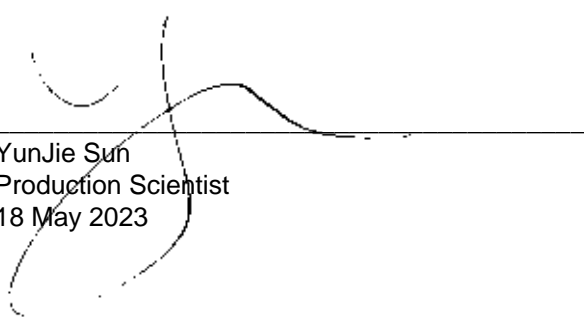
**Product Name:** *BglI*  
**Catalog Number:** *R0143L*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10188474*  
**Expiration Date:** *05/2025*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*  
**Specification Version:** *PS-R0143S/L v1.0*

| BglI Component List |                       |            |                      |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number     | Component Description | Lot Number | Individual QC Result |
| R0143LVIAL          | BglI                  | 10188472   | Pass                 |
| B6003SVIAL          | NEBuffer™ r3.1        | 10182162   | Pass                 |

| Assay Name/Specification  | Lot # 10188474 |
|---|----------------|
| <p><b>Endonuclease Activity (Nicking)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 units of BglI incubated for 4 hours at 37°C results in &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>           | Pass           |
| <p><b>Exonuclease Activity (Radioactivity Release)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 100 units of BglI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>  | Pass           |
| <p><b>Ligation and Recutting (Terminal Integrity)</b><br/>           After a 50-fold over-digestion of Lambda DNA with BglI, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, &gt;95% can be recut with BglI.</p>                                  | Pass           |
| <p><b>Non-Specific DNase Activity (16 Hour)</b><br/>           A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 50 units of BglI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p> | Pass           |

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

  
YunJie Sun  
Production Scientist  
18 May 2023

  
Michael Tonello

Michael Tonello  
Packaging Quality Control Inspector  
05 Jul 2023