

## New England Biolabs Certificate of Analysis

**Product Name:** Bpu10I  
**Catalog Number:** R0649S  
**Concentration:** 5,000 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:** 10096992  
**Expiration Date:** 11/2022  
**Storage Temperature:** -20°C  
**Storage Conditions:** 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA  
**Specification Version:** PS-R0649S/L v1.0

| Bpu10I Component List |                       |            |                      |
|-----------------------|-----------------------|------------|----------------------|
| NEB Part Number       | Component Description | Lot Number | Individual QC Result |
| R0649SVIAL            | Bpu10I                | 10089978   | Pass                 |
| B7203SVIAL            | NEBuffer™ 3.1         | 10092685   | Pass                 |

| Assay Name/Specification  | Lot # 10096992 |
|---|----------------|
| <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 25 units of Bpu10I incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.   | Pass           |
| <b>Ligation and Recutting (Terminal Integrity)</b><br>After a 5-fold over-digestion of Lambda DNA with Bpu10I, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~50% can be recut with Bpu10I.                                      | Pass           |
| <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 5 Units of Bpu10I incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass           |

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

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15 Jan 2021



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15 Jan 2021