

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

| Product Name:          | Bpml   |
|------------------------|--|
| Catalog Number:        | R0565L   |
| Concentration:         | 2,000 U/ml   |
| Unit Definition:       | One unit is defined as the amount of enzyme required to digest 1 $\mu$ g of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 $\mu$ l. |
| Packaging Lot Number:  | 10172249   |
| Expiration Date:       | 08/2024  |
| Storage Temperature:   | -20°C  |
| Storage Conditions:    | 200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%<br>Glycerol, 200 μg/ml BSA  |
| Specification Version: | PS-R0565S/L v2.0   |

| BpmI Component List |                       |            |                      |  |
|---------------------|-----------------------|------------|----------------------|--|
| NEB Part Number     | Component Description | Lot Number | Individual QC Result |  |
| R0565LVIAL          | Bpml                  | 10158985   | Pass                 |  |
| B6003SVIAL          | NEBuffer™ r3.1        | 10146827   | Pass                 |  |

| Assay Name/Specification   | Lot # 10172249 |
|--|----------------|
| <b>Exonuclease Activity (Radioactivity Release)</b><br>A 50 μl reaction in NEBuffer 3.1 containing 1 μg of a mixture of single and<br>double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 10 units of BpmI incubated for 4<br>hours at 37°C releases <0.1% of the total radioactivity.  | 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 2<br>Units of Bpml incubated for 16 hours at 37°C results in a DNA pattern free of<br>detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE:<br>although no nuclease degradation is detected under these conditions, extended<br>incubations and/or high concentrations of this enzyme may result in star activity.<br>See the product FAQ for recommended reaction conditions for this enzyme. | Pass           |
| <b>Ligation and Recutting (Terminal Integrity)</b><br>After a 10-fold over-digestion of Lambda DNA with BpmI, >95% of the DNA fragments<br>can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments,<br>~75% can be recut with BpmI.  | Pass           |

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





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Packaging Quality Control Inspector 18 Nov 2022

