

*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:          | Bmrl   |
|------------------------|--|
| Catalog Number:        | R0600S   |
| Concentration:         | 5,000 U/ml   |
| Unit Definition:       | One unit is defined as the amount of enzyme required to digest 1 μg<br>of Lambda DNA (Hind III digest) in 1 hour at 37°C in a total<br>reaction volume of 50 μl. |
| Packaging Lot Number:  | 10126571   |
| Expiration Date:       | 10/2023  |
| Storage Temperature:   | -20°C  |
| Storage Conditions:    | 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%<br>Glycerol, 500 μg/ml BSA  |
| Specification Version: | PS-R0600S/L v1.0   |

| Bmrl Component List |                       |            |                      |  |
|---------------------|-----------------------|------------|----------------------|--|
| NEB Part Number     | Component Description | Lot Number | Individual QC Result |  |
| R0600SVIAL          | Bmrl                  | 10126570   | Pass                 |  |
| B6002SVIAL          | NEBuffer™ r2.1        | 10102965   | Pass                 |  |

| Assay Name/Specification   | Lot # 10126571 |
|--|----------------|
| Endonuclease Activity (Nicking)  | Pass           |
| A 50 µl reaction in NEBuffer 2.1 containing 1 µg of supercoiled PhiX174 DNA and a    |                |
| minimum of 5 units of BmrI incubated for 4 hours at 37°C results in <50% conversion  |                |
| to the nicked form as determined by agarose gel electrophoresis.                     |                |
| Ligation and Recutting (Terminal Integrity)  | Pass           |
| After a 2-fold over-digestion of Lambda HindIII DNA with Bmrl, ~75% of the DNA       |                |
| fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated    |                |
| fragments, >95% can be recut with Bmrl.  |                |
| Non-Specific DNase Activity (16 Hour)  | Pass           |
| A 50 µl reaction in NEBuffer 2.1 containing 1 µg of Lambda HindIII DNA and a minimum |                |
| of 5 Units of BmrI incubated for 16 hours at 37°C results in a DNA pattern free of   |                |
| detectable nuclease degradation as determined by agarose gel electrophoresis.        |                |
| Protein Purity Assay (SDS-PAGE)  | Pass           |
| Bmrl is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. |                |

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





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Penghua Zhang Production Scientist 28 Oct 2021

Josh Hersey

Packaging Quality Control Inspector 28 Oct 2021

