

## 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 of Lambda DNA (Hind III digest) in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Lot Number:** 10050938  
**Expiration Date:** 08/2021  
**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-R0600S/L v1.0


Bmrl Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0600SVIAL	Bmrl	10050939	Pass
B7202SVIAL	NEBuffer™ 2.1	10035939	Pass

Assay Name/Specification	Lot # 10050938
<p><b>Endonuclease Activity (Nicking)</b>            A 50 µl reaction in NEBuffer 2.1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 units of Bmrl incubated for 4 hours at 37°C results in &lt;50% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Ligation and Recutting (Terminal Integrity)</b>            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, &gt;95% can be recut with Bmrl.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in NEBuffer 2.1 containing 1 µg of Lambda HindIII DNA and a minimum of 5 Units of Bmrl 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
<p><b>Protein Purity Assay (SDS-PAGE)</b>            Bmrl is &gt;95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	Pass

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



Doreen Duquette  
Production Scientist  
06 Feb 2019



Jay Minichiello  
Packaging Quality Control Inspector  
09 Aug 2019