

## 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.*  
**Packaging Lot Number:** *10084398*  
**Expiration Date:** *09/2022*  
**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-R0600S/L v1.0*

Bmrl Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0600SVIAL	Bmrl	10084399	Pass
B7202SVIAL	NEBuffer™ 2.1	10070034	Pass

Assay Name/Specification	Lot # 10084398
<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>	<b>Pass</b>
<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>	<b>Pass</b>
<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>	<b>Pass</b>
<p><b>Protein Purity Assay (SDS-PAGE)</b>            Bmrl is &gt;95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	<b>Pass</b>

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



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22 Oct 2020



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