

## New England Biolabs Certificate of Analysis

*Product Name:* BmrI  
*Catalog #:* R0600S/L  
*Concentration:* 5,000 units/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 #:* 0071301  
*Assay Date:* 01/2013  
*Expiration Date:* 01/2015  
*Storage Temp:* -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  
*Effective Date:* 28 Jun 2013

Assay Name/Specification (minimum release criteria)	Lot #0071301
<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 BmrI incubated for 4 hours at 37°C results in <50% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Ligation and Recutting (Terminal Integrity)</b> - After a 2-fold over-digestion of Lambda HindIII DNA with BmrI, ~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 BmrI.	<b>Pass</b>
<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 BmrI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> - BmrI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	<b>Pass</b>

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by  
Derek Robinson  
28 Jun 2013



Inspected by  
David Hough  
28 Jun 2013

