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New England Biolabs
Product Specification

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.*
Shelf Life:	*24 months*
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)
Endonuclease Activity (Nicking) - 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) - 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.
Non-Specific DNase Activity (16 Hour) - 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) - BmrI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.

* *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.*

Derek Robinson
Director of Quality Control

Date 28 Jun 2013