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: BbvI

Catalog #: R0173S/L
Concentration: 2,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction

volume of 50  $\mu$ l.

 Lot #:
 0361504

 Assay Date:
 04/2015

 Expiration Date:
 4/2017

 Storage Temp:
 -20°C

Storage Conditions: 200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA

Specification Version: PS-R0173S/L v1.0
Effective Date: 04 Oct 2013

Assay Name/Specification (minimum release criteria)	Lot #0361504
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 μl reaction in CutSmart™ Buffer containing 1 μg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 2 units of BbvI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> - After a 5-fold over-digestion of Lambda DNA with BbvI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 25°C. Of these ligated fragments, >95% can be recut with BbvI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart <sup>TM</sup> Buffer containing 1 μg of pBR322 DNA and a minimum of 2 units of BbvI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

Authorized by Derek Robinson

04 Oct 2013

nqa.
ISO 14001
Registered
Environmental



Inspected by Katrina Francescone

01 Apr 2015

<sup>\*</sup> 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.