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: BceAI

Catalog #: R0623S/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 #:
 0081409

 Assay Date:
 09/2014

 Expiration Date:
 9/2016

 Storage Temp:
 -20 °C

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

Specification Version: PS-R0623S/L v1.0
Effective Date: 03 Sep 2013

Assay Name/Specification (minimum release criteria)	Lot #0081409
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 $\mu$ l reaction in NEBuffer 3.1 containing 1 $\mu$ g of a mixture of single and double-stranded [ $^3$ H] <i>E. coli</i> DNA and a minimum of 10 units of BceAI 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 pBR322 DNA with BceAI, >95% 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 BceAI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 $\mu$ l reaction in NEBuffer 3.1 containing 1 $\mu$ g of pBR322 DNA and a minimum of 2 Units of BceAI 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

03 Sep 2013

nga.
ISO 9001
Registered
Quality





Inspected by
Mala Samaranayake
23 Sep 2014

<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.