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: BclI

Catalog #: R0160S/L
Concentration: 10,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (dam-) in 1 hour at 50°C in a total

reaction volume of 50  $\mu$ l.

 Lot #:
 0201401

 Assay Date:
 01/2014

 Expiration Date:
 01/2016

 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-R0160S/L v1.0
Effective Date: 07 Jun 2013

| Assay Name/Specification (minimum release criteria)  | Lot #0201401 |
|--|--------------|
| <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 100 units of BcII incubated for 4 hours at 50°C releases <0.1% of the total radioactivity. | Pass         |
| <b>Ligation and Recutting (Terminal Integrity)</b> - After a 20-fold over-digestion of Lambda dam- DNA with BcII, >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 BcII.  | Pass         |
| Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda dam - DNA and a minimum of 30 units of BcII incubated for 16 hours at 50°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.         | Pass         |

<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.

Authorized by Derek Robinson 07 Jun 2013







Inspected by Penghua Zhang 21 Jan 2014