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: I-CeuI

Catalog #: R0699S/L

Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to cleave 1 µg of pBHS ScaI-linearized Control Plasmid in 3 hours at 37°

C in a total reaction volume of 50  $\mu$ l.

 Lot #:
 0091510

 Assay Date:
 10/2015

 Expiration Date:
 10/2017

 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-R0699S/L v1.0
Effective Date: 25 Nov 2013

Assay Name/Specification (minimum release criteria)	Lot #0091510
Endonuclease Activity (Nicking) - A 50 μl reaction in CutSmart™ Buffer containing 1 μg of supercoiled PhiX174 DNA and a minimum of 15 Units of I-CeuI incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<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 50 units of I-CeuI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> - After a 10-fold over-digestion of pBHS-ScaI DNA with I-CeuI, >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 I-CeuI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in CutSmart <sup>TM</sup> Buffer containing 1 µg of pBHS-ScaI DNA and a minimum of 50 Units of I-CeuI 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 25 Nov 2013

nga.
ISO 9001
Registered
Quality





Inspected by Jianying Luo 28 Oct 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.