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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 µl.

 Lot #:
 0091411

 Assay Date:
 11/2014

 Expiration Date:
 11/2016

 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 #0091411
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
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart™ Buffer containing 1 μg of a mixture of single and double-stranded [³ 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
Ligation and Recutting (Terminal Integrity) - 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 TM 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







Inspected by Jianying Luo 14 Nov 2014

^{*} 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.