

## New England Biolabs Certificate of Analysis

**Product Name:** I-CeuI  
**Catalog Number:** R0699L  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to cleave 1 µg of pBHS Scal-linearized Control Plasmid in 3 hours at 37°C in a total reaction volume of 50 µl.  
**Lot Number:** 10008635  
**Expiration Date:** 04/2020  
**Storage Temperature:** -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

I-CeuI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0699LVIAL	I-CeuI	0091804	Pass
N0423SVIAL	pBHS Scal-linearized Control Plasmid	0011804	Pass
B7204SVIAL	CutSmart® Buffer	3081804	Pass

Assay Name/Specification	Lot # 10008635
<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] E. coli 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>Endonuclease Activity (Nicking)</b> 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>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of pBHS-Scal 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
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBHS-Scal DNA and a minimum	Pass

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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.	

This product has been tested and shown to be in compliance with all specifications.

  
Penghua Zhang  
Production Scientist  
14 Jun 2018

  
Michael Tonello  
Packaging Quality Control Inspector  
14 Jun 2018