

## New England Biolabs Certificate of Analysis

**Product Name:** I-CeuI  
**Catalog Number:** R0699S  
**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.  
**Packaging Lot Number:** 10162742  
**Expiration Date:** 07/2024  
**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
R0699SVIAL	I-CeuI	10156928	Pass
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10156925	Pass
B6004SVIAL	rCutSmart™ Buffer	10162781	Pass

Assay Name/Specification	Lot # 10162742
<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>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBHS-Scal 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
<b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of pBHS-Scal DNA with I-CeuI, >95% of the DNA	Pass

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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.	

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

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05 Jul 2022



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