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New England Biolabs Certificate of Analysis

Product Name: I-Ceul
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: 10225984
Expiration Date: 11/2025
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-Ceul Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0699SVIAL	I-Ceul	10217803	Pass	
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10217804	Pass	
B6004SVIAL	rCutSmart™ Buffer	10211340	Pass	

Assay Name/Specification	Lot # 10225984
Endonuclease Activity (Nicking)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 15 Units of I-Ceul incubated for 4 hours at 37°C results in <20%	
conversion to the nicked form as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and	
double-stranded [³H] 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.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 10-fold over-digestion of pBHS-Scal DNA with I-Ceul, >95% of the DNA	
ragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated	
fragments, >95% can be recut with I-Ceul.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 μl reaction in CutSmart™ Buffer containing 1 μg of pBHS-Scal DNA and a minimum	



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Assay Name/Specification	Lot # 10225984
of 50 Units of I-Ceul 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

YunJie Sun \
Production Scientist
28 Dec 2023

Michael Tonello
Packaging Quality (

Packaging Quality Control Inspector

03 Jan 2024



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