

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-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.

Lot Number: 10033475
Expiration Date: 01/2021
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	10033476	Pass	
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10034783	Pass	
B7204SVIAL	CutSmart® Buffer	10031565	Pass	

Assay Name/Specification	Lot # 10033475
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-Ceul 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	
ragments, >95% can be recut with I-CeuI.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 μl reaction in CutSmart™ Buffer containing 1 μg of pBHS-Scal DNA and a minimum	



R0699S / Lot: 10033475

Page 1 of 2

Assay Name/Specification	Lot # 10033475
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.

Tony Spear-Alfonso Production Scientist

02 Jan 2019

Jay Minichiello

Packaging Quality Control Inspector

22 Jan 2019

