

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.
Packaging Lot Number:	10244727
Expiration Date:	03/2026
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	10233824	Pass	
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10233825	Pass	
B6004SVIAL	rCutSmart™ Buffer	10238052	Pass	

Assay Name/Specification	Lot # 10244727
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-Ceul incubated for 4 hours at 37 ^o 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] 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.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBHS-Scal DNA with I-Ceul, >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-Ceul.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBHS-Scal DNA and a minimum	Pass





240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

Assay Name/Specification	Lot # 10244727
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.

Ana Egana Production Scientist 11 Jun 2024

Michae m. 1

Michael Tonello Packaging Quality Control Inspector 11 Jun 2024

