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New England Biolabs Certificate of Analysis

Product Name: I-Ceul
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.

Packaging Lot Number: 10079427
Expiration Date: 12/2021
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	
R0699LVIAL	I-Ceul	10061312	Pass	
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10062465	Pass	
B7204SVIAL	CutSmart® Buffer	10075571	Pass	

Assay Name/Specification	Lot # 10079427
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBHS-Scal DNA and a minimum 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.	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
Exonuclease Activity (Radioactivity Release) 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.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and	Pass



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Assay Name/Specification	Lot # 10079427
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.	

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

Penghua Zhang Production Scientist

22 Jul 2020

Michael Tonello

Packaging Quality Control Inspector

22 Jul 2020



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