

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.
Lot Number: 10052610
Expiration Date: 06/2021
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-CeuI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0699SVIAL	I-CeuI	10047739	Pass
N0423SVIAL	pBHS Scal-linearized Control Plasmid	10048631	Pass
B7204SVIAL	CutSmart® Buffer	10046087	Pass


Assay Name/Specification	Lot # 10052610
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-CeuI incubated for 4 hours at 37°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-CeuI 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-CeuI, >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-CeuI.	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

Assay Name/Specification	Lot # 10052610
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.



Jianying Luo
Production Scientist
20 Jun 2019



Jay Minichiello
Packaging Quality Control Inspector
20 Aug 2019