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New England Biolabs Certificate of Analysis

Product Name: CviAII

Catalog Number: R0640L

Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of pUC19 DNA in 1 hour at 25°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10111013
Expiration Date: 06/2022
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl, 250 mM NaCl, 10 mM TCEP-HCl, 1 mM DTT, 0.1 mM EDTA,

0.15% Triton®X-100, 50% Glycerol, 200 μg/ml BSA, (pH 7.4 @ 25°C)

Specification Version: PS-R0640S/L v2.0

CviAll Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0640LVIAL	CviAII	10111012	Pass	
B6004SVIAL	rCutSmart™ Buffer	10103711	Pass	

Assay Name/Specification	Lot # 10111013
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 10 units of CviAII incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pUC19 DNA and a minimum of 30 units of CviAll incubated for 16 hours at 25°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 pUC19 DNA with CviAII, >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 CviAII.	Pass

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

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Production Scientist

11 Aug 2021

Michael Tonello

Packaging Quality Control Inspector

11 Aug 2021

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