

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: 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: 10183296 Expiration Date: 03/2024 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	10183297	Pass	
B6004SVIAL	rCutSmart™ Buffer	10182170	Pass	

Assay Name/Specification	Lot # 10183296
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
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
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

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.



R0640L / Lot: 10183296

Page 1 of 2



Mala-Samaranayake **Production Scientist** 16 Mar 2023

Michael Tonello

Packaging Quality Control Inspector 22 May 2023

R0640L / Lot: 10183296

Page 2 of 2