New England BioLabs Inc.

be INSPIRED
drive DISCOVERY
stay GENUINE

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:	*R0640S*
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:	*10111014*
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*

CviAII Component List

NEB Part Number	Component Description	Lot Number	Individual QC Result
R0640SVIAL	CviAII	10111011	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10108730	**Pass**

Assay Name/Specification	Lot # 10111014
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 CviAII incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation 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 [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**

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.

nqa. ISO 9001 Registered Quality Management
nqa. ISO 13485 Registered Medical Devices
nqa. ISO 14001 Registered Environmental Management

R0640S / Lot: 10111014
Page 1 of 2

Mala Samaranayake
Production Scientist
02 Jul 2021

Josh Hersey
Packaging Quality Control Inspector
02 Jul 2021