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 #: R0640S/L

Concentration: 10,000 units/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 μ l.

 Lot #:
 0091505

 Assay Date:
 05/2015

 Expiration Date:
 05/2016

 Storage Temp:
 -20°C

Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 μ g/ml

BSA

Specification Version: PS-R0640S/L v1.0
Effective Date: 22 Oct 2013

Assay Name/Specification (minimum release criteria)	Lot #0091505
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> 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 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

Authorized by Derek Robinson 22 Oct 2013

nqa.
ISO 9001
Registered
Quality





Inspected by
Mala Samaranayake
11 May 2015

^{*} The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.