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: CviKI-1

Catalog #: R0710S/L

Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction

volume of 50  $\mu$ l.

 Lot #:
 0011302

 Assay Date:
 02/2013

 Expiration Date:
 02/2015

 Storage Temp:
 -20 °C

Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA

Specification Version: PS-R0710S/L v1.0
Effective Date: 12 Sep 2013

Assay Name/Specification (minimum release criteria)	Lot #0011302
<b>Ligation and Recutting (Terminal Integrity)</b> - After a 5-fold over-digestion of pBR322 DNA with CviKI-1, ~75% 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 CviKI-1.	Pass
Non-Specific DNase Activity (16 hour) - A 50 μl reaction in CutSmart <sup>TM</sup> Buffer containing 1 μg of pBR322 DNA and a minimum of 5 Units of CviKI-1 incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	Pass

<sup>\*</sup> 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.

Authorized by Derek Robinson 12 Sep 2013







Inspected by Diana O'Loane 12 Sep 2013

Diana House