

## New England Biolabs Certificate of Analysis

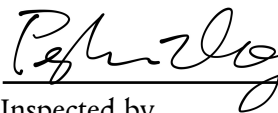
*Product Name:* CviKI-1  
*Catalog #:* R0710S/L  
*Concentration:* 5,000 units/ml  
*Unit Definition:* One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.  
*Lot #:* 0031710  
*Assay Date:* 10/2017  
*Expiration Date:* 10/2019  
*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:* 30 Sep 2013

Assay Name/Specification (minimum release criteria)	Lot #0031710
<p><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, &gt;95% can be recut with CviKI-1.</p>	<b>Pass</b>
<p><b>Non-Specific DNase Activity (16 hour)</b> - A 50 µl reaction in CutSmart™ 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.</p>	<b>Pass</b>

\* 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  
30 Sep 2013



Inspected by  
Penghua Zhang  
24 Oct 2017

