

## New England Biolabs Certificate of Analysis

**Product Name:** CviKI-1  
**Catalog Number:** R0710S  
**Concentration:** 5,000 U/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 Number:** 10046190  
**Expiration Date:** 05/2021  
**Storage Temperature:** -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

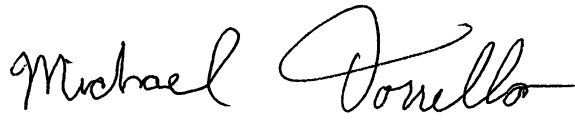
CviKI-1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0710SVIAL	CviKI-1	10046191	Pass
B7204SVIAL	CutSmart® Buffer	10042966	Pass

Assay Name/Specification	Lot # 10046190
<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>	Pass
<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>	Pass

This product has been tested and shown to be in compliance with all specifications.



Derek Robinson  
Production Scientist  
08 May 2019



Michael Tonello  
Packaging Quality Control Inspector  
29 May 2019