

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.
Packaging Lot Number: 10078891
Expiration Date: 07/2022
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	10078892	Pass
B7204SVIAL	CutSmart® Buffer	10075570	Pass

Assay Name/Specification	Lot # 10078891
Ligation and Recutting (Terminal Integrity) 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™ 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

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



Penghua Zhang
Production Scientist
15 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
15 Jul 2020