

New England Biolabs Certificate of Analysis

Product Name: BspCNI
Catalog Number: R0624S
Concentration: 2,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 25°C in a total reaction volume of 50 µl.
Lot Number: 10053540
Expiration Date: 08/2020
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0624S/L v1.0

BspCNI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0624SVIAL	BspCNI	10053539	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10049759	Pass
B7204SVIAL	CutSmart® Buffer	10046087	Pass

Assay Name/Specification	Lot # 10053540
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 2 units of BspCNI incubated for 4 hours at 25°C releases <0.2% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of Lambda DNA with BspCNI, ~50% 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 BspCNI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 6 Units of BspCNI incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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



Doreen Duquette
Production Scientist
09 Aug 2019



Jay Minichiello
Packaging Quality Control Inspector
21 Aug 2019