

## 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.  
**Packaging Lot Number:** 10069386  
**Expiration Date:** 03/2021  
**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	10069387	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10070537	Pass
B7204SVIAL	CutSmart® Buffer	10071078	Pass

Assay Name/Specification	Lot # 10069386
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> 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
<b>Ligation and Recutting (Terminal Integrity)</b> 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
<b>Non-Specific DNase Activity (16 Hour)</b> 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.



Penghua Zhang  
Production Scientist  
07 May 2020



Jay Minichiello  
Packaging Quality Control Inspector  
07 May 2020