

## 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 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10216514  
**Expiration Date:** 10/2025  
**Storage Temperature:** -20°C  
**Storage Conditions:** 50 mM KCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 0.32 mM S-adenosylmethionine (SAM), 50% Glycerol, 200 µg/ml BSA (pH 7.4 @ 25°C)  
**Specification Version:** PS-R0624S v2.0

BspCNI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0624SVIAL	BspCNI	10211259	Pass
B6004SVIAL	rCutSmart™ Buffer	10207415	Pass

Assay Name/Specification	Lot # 10216514
<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 37°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 37°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.

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26 Oct 2023

  
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