

## 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:** 10023308  
**Expiration Date:** 09/2019  
**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	10020685	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10018391	Pass
B7204SVIAL	CutSmart® Buffer	10015396	Pass

Assay Name/Specification	Lot # 10023308
<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.



Tony Spear-Alfonso  
Production Scientist  
09 Aug 2018



Michael Tonello  
Packaging Quality Control Inspector  
04 Oct 2018