

## New England Biolabs Certificate of Analysis

**Product Name:** Nt.BbvCI  
**Catalog Number:** R0632L  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pUB DNA to open circular form in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10074138  
**Expiration Date:** 05/2022  
**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-R0632S/L v1.0

Nt.BbvCI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0632LVIAL	Nt.BbvCI	10074137	Pass
B7204SVIAL	CutSmart® Buffer	10075570	Pass

Assay Name/Specification	Lot # 10074138
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled pUC19 DNA and a minimum of 30 units of Nt.BbvCI incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<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 30 units of Nt.BbvCI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	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 30 Units of Nt.BbvCI 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.



Penghua Zhang  
Production Scientist  
13 Jul 2020



Michael Tonello  
Packaging Quality Control Inspector  
13 Jul 2020