

## New England Biolabs Certificate of Analysis

**Product Name:** BbvI  
**Catalog Number:** R0173S  
**Concentration:** 2,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10069718  
**Expiration Date:** 03/2022  
**Storage Temperature:** -20°C  
**Storage Conditions:** 200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA  
**Specification Version:** PS-R0173S/L v1.0


BbvI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0173SVIAL	BbvI	10069719	Pass
B7204SVIAL	CutSmart® Buffer	10068802	Pass

Assay Name/Specification	Lot # 10069718
<p><b>Non-Specific DNase Activity (16 Hour)</b>  A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBR322 DNA and a minimum of 2 units of BbvI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Ligation and Recutting (Terminal Integrity)</b>  After a 5-fold over-digestion of Lambda DNA with BbvI, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 25°C. Of these ligated fragments, &gt;95% can be recut with BbvI.</p>	Pass
<p><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 BbvI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass

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



Jianying Luo  
 Production Scientist  
 18 Mar 2020



Michael Tonello  
 Packaging Quality Control Inspector  
 18 Mar 2020