240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
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www.neb.com
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New England Biolabs
Certificate of Analysis

Product Name:	*BbvCI*
Catalog Number:	*R0601L*
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 rCutSmart™ Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10279356*
Expiration Date:	*02/2026*
Storage Temperature:	*-20°C*
Storage Conditions:	*10 mM Tris-HCl, 300 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml rAlbumin (pH 7.4 @ 25°C)*
Specification Version:	*PS-R0601S/L v3.0*

BbvCI Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0601LVIAL	BbvCI	10274638	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10265039	**Pass**

Assay Name/Specification	**Lot # 10279356**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 10 units of BbvCI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of Lambda DNA with BbvCI, 95% can be recut with BbvCI.	**Pass**
Non-Specific DNase Activity (16 hour) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 2 units of BbvCI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	**Pass**
Protein Purity Assay (SDS-PAGE) BbvCI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue	**Pass**

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Assay Name/Specification	Lot # 10279356
detection. **qPCR DNA Contamination (E. coli Genomic)** A minimum of 2 units of BbvCI is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.	**Pass**

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Kyle Pepi
Production Scientist
14 Feb 2025

Josh Hersey
Packaging Quality Control Inspector
18 Feb 2025