

New England Biolabs Certificate of Analysis

Product Name: *BbvCI*
Catalog Number: *R0601S*
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: *10239976*
Expiration Date: *03/2025*
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*

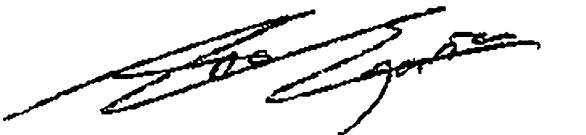
BbvCI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0601SVIAL	BbvCI	10236053	Pass
B6004SVIAL	rCutSmart™ Buffer	10237088	Pass

Assay Name/Specification	Lot # 10239976
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] 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

Assay Name/Specification	Lot # 10239976
<p>detection.</p> <p>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.</p>	<p>Pass</p>

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.



Ana Egana
Production Scientist
21 May 2024



Josh Hersey
Packaging Quality Control Inspector
21 May 2024