

New England Biolabs Certificate of Analysis

Product Name: BciVI
Catalog Number: R0596S
Concentration: 10,000 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: 10136290
Expiration Date: 01/2024
Storage Temperature: -80°C
Storage Conditions: 10 mM Tris-HCl, 250 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA (pH 7.4 @ 25°C)
Specification Version: PS-R0596S/L/V v2.0

BciVI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0596SVIAL	BciVI	10136289	Pass
B6004SVIAL	rCutSmart™ Buffer	10132770	Pass

Assay Name/Specification	Lot # 10136290
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 BciVI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 30 units of BciVI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BciVI, ~25% 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 BciVI.	Pass
Protein Purity Assay (SDS-PAGE) BciVI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	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.



Penghua Zhang
Production Scientist
11 Feb 2022



Michael Tonello
Packaging Quality Control Inspector
11 Feb 2022