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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 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10091718
Expiration Date: 09/2022
Storage Temperature: -20°C

Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 0.15% Triton X-100, 200 µg/ml BSA

Specification Version: PS-R0596S/L v1.0

BciVI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0596SVIAL	BciVI	10082616	Pass	
B7204SVIAL	CutSmart® Buffer	10089402	Pass	

Assay Name/Specification	Lot # 10091718
Protein Purity Assay (SDS-PAGE)	Pass
BciVI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ 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
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in CutSmart™ Buffer containing 1 μg of a mixture of single and double-stranded [³H] 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
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

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



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Production Scientist 23 Nov 2020

Michael Tonello

Packaging Quality Control Inspector

23 Nov 2020



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