

New England Biolabs Certificate of Analysis

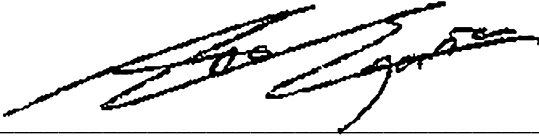
Product Name: *BciVI*
Catalog Number: *R0596L*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in rCutSmart Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10250722*
Expiration Date: *05/2026*
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
R0596LVIAL	BciVI	10242859	Pass
B6004SVIAL	rCutSmart™ Buffer	10243105	Pass

Assay Name/Specification	Lot # 10250722
<p>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 BciVI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.</p>	Pass
<p>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.</p>	Pass
<p>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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) BciVI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	Pass

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

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Production Scientist
08 Jul 2024



Michael Tonello
Packaging Quality Control Inspector
08 Jul 2024