

New England Biolabs Certificate of Analysis

Product Name: *BtsI-v2*
Catalog Number: *R0667L*
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: *10261295*
Expiration Date: *09/2026*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM KCl , 10 mM Tris-HCl, 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 200 µg/ml BSA (pH 7.4 @ 25°C)*
Specification Version: *PS-R0667S/L v3.0*

BtsI-v2 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0667LVIAL	BtsI-v2	10254194	Pass
B6004SVIAL	rCutSmart™ Buffer	10250203	Pass

Assay Name/Specification	Lot # 10261295
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of BtsI-v2 incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Functional Testing (15 minute Digest) A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and 1 µl of BtsI-v2 incubated for 15 minutes at 37°C results in complete digestion as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BtsI-v2, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with BtsI-v2.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 10 units of BtsI-v2 incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

Assay Name/Specification	Lot # 10261295
Protein Purity Assay (SDS-PAGE) Btsl-v2 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.



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Production Scientist
25 Sep 2024



Michael Tonello
Packaging Quality Control Inspector
26 Sep 2024