

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: 10182962
Expiration Date: 03/2025
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

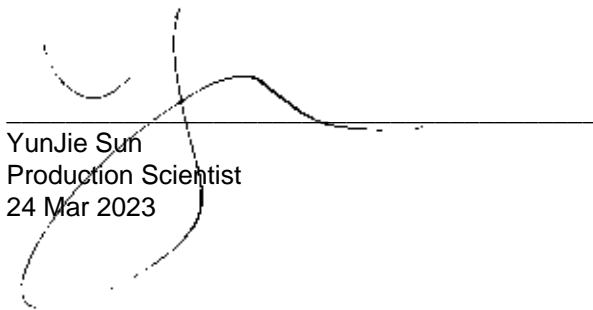
BtsI-v2 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0667LVIAL	BtsI-v2	10182961	Pass
B6004SVIAL	rCutSmart™ Buffer	10178016	Pass

Assay Name/Specification	Lot # 10182962
<p>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 50 units of BtsI-v2 incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>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.</p>	Pass
<p>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.</p>	Pass
<p>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.</p>	Pass


Assay Name/Specification	Lot # 10182962
Protein Purity Assay (SDS-PAGE) Btsl-v2 is $\geq 95\%$ 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.



YunJie Sun
Production Scientist
24 Mar 2023



Michael Tonello
Packaging Quality Control Inspector
28 Mar 2023