

New England Biolabs Certificate of Analysis

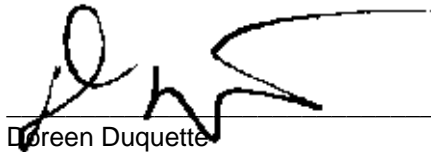
Product Name: BtsI-v2
Catalog Number: R0667L
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of LambdaDNA in 1 hour at 55°C in a total reaction volume of 50 µl.
Lot Number: 10041553
Expiration Date: 04/2021
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 200 µg/ml BSA
Specification Version: PS-R0667S/L v1.0

BtsI-v2 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0667LVIAL	BtsI-v2	10041554	Pass
B7204SVIAL	CutSmart® Buffer	10036666	Pass

Assay Name/Specification	Lot # 10041553
<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 incubated for 4 hours at 55°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Functional Test (15 minute Digest) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and 1 µl of BtsI incubated for 15 minutes at 55°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, >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.</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 incubated for 16 hours at 55°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass

Assay Name/Specification	Lot # 10041553
<p>Protein Purity Assay (SDS-PAGE) Bts1 is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	<p>Pass</p>

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



Doreen Duquette
Production Scientist
22 Mar 2019



Michael Tonello
Packaging Quality Control Inspector
29 Apr 2019