

New England Biolabs Certificate of Analysis

Product Name: BspHI
Catalog Number: R0517L
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: 10160139
Expiration Date: 08/2024
Storage Temperature: -20°C
Storage Conditions: 100 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-R0517S/L v1.0

| BspHI Component List | | | |
|----------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0517LVIAL | BspHI | 10160138 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10163561 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10163560 | Pass |

| Assay Name/Specification | Lot # 10160139 |
|--|----------------|
| <p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BspHI, >95% 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 BspHI.</p> | Pass |
| <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 100 units of BspHI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Protein Purity Assay (SDS-PAGE) BspHI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</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 50 Units of BspHI 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 |

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

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Stephanie Cornelio
Production Scientist
10 Aug 2022



Josh Hersey
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07 Nov 2022