

New England Biolabs Certificate of Analysis

Product Name: BamHI Methyltransferase
Catalog Number: M0223L
Concentration: 4,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to protect 1 µg Lambda DNA in 1 hour at 37°C in a total reaction volume of 10 µl against cleavage by BamHI restriction endonuclease.
Lot Number: 10016793
Expiration Date: 09/2019
Storage Temperature: -20°C
Storage Conditions: 50 mM Tris-HCl, 1 mM DTT, 10 mM EDTA, 50 % Glycerol, 200 µg/ml BSA, (pH 7.5 @ 25°C)
Specification Version: PS-M0223S/L v1.0

| BamHI Methyltransferase Component List | | | |
|--|---|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0223LVIAL | BamHI Methyltransferase | 10016790 | Pass |
| B9003SVIAL | S-adenosylmethionine (SAM) | 10018391 | Pass |
| B0223SVIAL | BamHI Methyltransferase Reaction Buffer | 0031704 | Pass |

| Assay Name/Specification | Lot # 10016793 |
|---|----------------|
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2 containing 1 µg of HindIII digested Lambda DNA and a minimum of 40 units of BamHI Methyltransferase 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>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 40 units of BamHI Methyltransferase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Functional Testing (Methyltransferase) A 10 µl reaction in BamHI Methyltransferase Reaction Buffer supplemented with 80 µM SAM containing 1 µg of Lambda DNA and 1 unit of BamHI Methyltransferase incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 10 units of BamHI in CutSmart® Buffer with 10 mM MgCl₂ incubated at</p> | Pass |

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|---|----------------|
| 37°C for 30 minutes as determined by agarose gel electrophoresis. | |

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



Tony Spear-Alfonso
Production Scientist
21 Aug 2018



Michael Tonello
Packaging Quality Control Inspector
31 Aug 2018