

New England Biolabs Certificate of Analysis

Product Name: *MspI Methyltransferase*
Catalog Number: *M0215S*
Concentration: *5,000 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 MspI restriction endonuclease.*
Packaging Lot Number: *10091744*
Expiration Date: *09/2022*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM Tris-HCl, 50 mM NaCl, 10 mM EDTA, 5 mM βME, 200 µg/ml BSA, 50% Glycerol, (pH 7.5 @ 25°C)*
Specification Version: *PS-M0215S v1.0*

| MspI Methyltransferase Component List | | | |
|---------------------------------------|--------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0215SVIAL | MspI Methyltransferase | 10080118 | Pass |
| B9003SVIAL | S-adenosylmethionine (SAM) | 10079763 | Pass |
| B0215SVIAL | MspI Methylase Reaction Buffer | 10062679 | Pass |

| Assay Name/Specification | Lot # 10091744 |
|--|----------------|
| <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 15 units of MspI Methyltransferase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2 containing 1 µg of Lambda-HindIII DNA and a minimum of 15 units of MspI 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>Functional Testing (Methyltransferase) A 10 µl reaction in MspI Methyltransferase Reaction Buffer supplemented with 80 µM SAM containing 1 µg of Lambda DNA and 1 unit of MspI Methyltransferase incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 5 units of MspI in NEBuffer 2 with 10 mM MgCl₂ incubated at 37°C for</p> | Pass |

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|--|----------------|
| 30 minutes as determined by agarose gel electrophoresis. | |

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

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Timothy Meixsell
Production Scientist
24 Nov 2020



Josh Hersey
Packaging Quality Control Inspector
24 Nov 2020