

New England Biolabs Certificate of Analysis

Product Name: CpG Methyltransferase (M.SssI)
Catalog Number: M0226S
Concentration: 4,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to protect 1 µg of Lambda DNA in a total reaction volume of 20 µl in 1 hour at 37°C against cleavage by BstUI restriction endonuclease.
Packaging Lot Number: 10218687
Expiration Date: 09/2024
Storage Temperature: -20°C
Storage Conditions: 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-M0226S/L v1.0

| CpG Methyltransferase (M.SssI) Component List | | | |
|---|--------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0226SVIAL | CpG Methyltransferase (M.SssI) | 10203155 | Pass |
| B9003SVIAL | S-adenosylmethionine (SAM) | 10210241 | Pass |
| B7002SVIAL | NEBuffer™ 2 | 10173666 | Pass |

| Assay Name/Specification | Lot # 10218687 |
|--|----------------|
| Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 40 units of CpG Methyltransferase (M.SssI) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of CpG Methyltransferase (M.SssI) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Functional Testing (Methyltransferase) A 20 µl reaction in NEBuffer 2 supplemented with 160 µM SAM containing 1 µg of Lambda DNA and 1 unit of CpG Methyltransferase (M.SssI) incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 10 units of BstUI in NEBuffer 2 incubated at 60°C for 1 hour as determined by agarose | Pass |

| Assay Name/Specification | Lot # 10218687 |
|---|--------------------|
| <p>gel electrophoresis.</p> <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2 containing 1 µg of Lambda DNA and a minimum of 100 units of CpG Methyltransferase (M.SssI) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p> | <p>Pass</p> |

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.



Jamie Souza
Production Scientist
12 Sep 2023



Michael Tonello
Packaging Quality Control Inspector
19 Dec 2023