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## New England Biolabs Certificate of Analysis

Product Name: BamHI Methyltransferase

Catalog Number: M0223S
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.

Packaging Lot Number: 10171725
Expiration Date: 11/2023
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

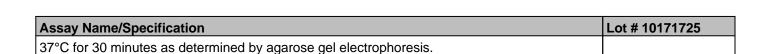
BamHI Methyltransferase Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M0223SVIAL	BamHI Methyltransferase	10171726	Pass	
B9003SVIAL	S-adenosylmethionine (SAM)	10157973	Pass	
B0223SVIAL	BamHI Methyltransferase Reaction Buffer	10103482	Pass	

Assay Name/Specification	Lot # 10171725
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 BamHl Methyltransferase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
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.	Pass
Functional Testing (Methyltransferase) A 10 μl reaction in BamHl Methyltransferase Reaction Buffer supplemented with 80 μM SAM containing 1 μg of Lambda DNA and 1 unit of BamHl Methyltransferase incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 10 units of BamHl in CutSmart® Buffer with 10 mM MgCl2 incubated at	Pass



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

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18 Nov 2022

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Packaging Quality Control Inspector

28 Nov 2022

