

## New England Biolabs Certificate of Analysis

**Product Name:** *S-adenosylmethionine (SAM)*  
**Catalog Number:** *B9003S*  
**Concentration:** *32 mM*  
**Packaging Lot Number:** *10242051*  
**Expiration Date:** *03/2026*  
**Storage Temperature:** *-20°C*  
**Specification Version:** *PS-B9003S v3.0*  
**Composition (1X):** *0.005 M Sulfuric Acid, 10 % Ethanol*

S-adenosylmethionine (SAM) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B9003SVIAL	S-adenosylmethionine (SAM)	10233985	Pass

Assay Name/Specification	Lot # 10242051
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 µl of S-adenosylmethionine (SAM) incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of PhiX174-HaeIII DNA and a minimum of 5 µl of S-adenosylmethionine (SAM) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>RNase Activity (Extended Digestion)</b> A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of S-adenosylmethionine (SAM) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	<b>Pass</b>
<b>Restriction Digest (CpG Resistant, SAM)</b> A 20 µl reaction in 1X NEBuffer 2 containing 1 µg of Lambda DNA, 1 unit of M. SssI (CpG Methyltransferase), and 160 µM S-adenosylmethionine (SAM) is incubated for 1 hour at 37°C. The resulting DNA is resistant to digestion with BstUI as determined by agarose gel electrophoresis.	<b>Pass</b>

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



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Production Scientist  
26 Mar 2024



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Talia Monkiewicz  
Packaging Quality Control Inspector  
31 May 2024