

## New England Biolabs Certificate of Analysis

Product Name: *S-adenosylmethionine (SAM)*  
 Catalog Number: *B9003S*  
 Concentration: *32 mM*  
 Packaging Lot Number: *10198029*  
 Expiration Date: *03/2024*  
 Storage Temperature: *-20°C*  
 Specification Version: *PS-B9003S v2.0*  
 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)	10193027	Pass

Assay Name/Specification	Lot # 10198029
<p><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 &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><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.</p>	Pass
<p><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, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p><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.</p>	Pass

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

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Nancy Considine  
Production Scientist  
11 Jul 2023



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Josh Hersey  
Packaging Quality Control Inspector  
27 Jul 2023