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New England Biolabs
Certificate of Analysis

Product Name:	*S-adenosylmethionine (SAM)*
Catalog Number:	*B9003S*
Concentration:	*32 mM*
Packaging Lot Number:	*10256965*
Expiration Date:	*10/2026*
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)	10256387	**Pass**

Assay Name/Specification	Lot # 10256965
Endonuclease Activity (Nicking) 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 37ºC results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	**Pass**
Non-Specific DNase Activity (16 Hour) 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 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
RNase Activity (Extended Digestion) 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.	**Pass**
Restriction Digest (CpG Resistant, SAM) 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.	**Pass**

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

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29 Oct 2024

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29 Oct 2024