

New England Biolabs Product Specification

Product Name: S-adenosylmethionine (SAM)
Catalog #: B9003S
Concentration: 32 mM
Shelf Life: 24 months
Storage Temp: -20°C
Composition (1X): 0.005 M Sulfuric Acid, 10 % Ethanol
Specification Version: PS-B9003S v3.0
Effective Date: 09 Aug 2023

Assay Name/Specification (minimum release criteria)

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 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.

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 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

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.

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.

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Date 09 Aug 2023

Doreen Duquette
Quality Approver

