Applications:
- A positive control for Methylation-Specific PCR (MSP) (2), Bisulfite sequencing, Methylation-sensitive Single-Nucleotide Primer Extension (Ms-SNuPE), Combined Bisulfite Restriction Analysis (COBRA), Bisulfite treatment and PCR-Single-Strand Conformation Polymorphism Analysis (Bisulfite-PCR-SSCP/BIps).

Supplied in: 10 mM Tris-HCl (pH 7.5) and 1 mM EDTA. Avoid multiple freeze/thaw cycles.

Quality Assurance: Purified free of contaminating proteins and RNA.

A$_{260/280}$ Ratio: 1.97

Quality Control Assays
Bisulfite conversion followed by Methylation-Specific PCR (MSP): 10 µl (1 µg) of CpG Methylated Jurkat Genomic DNA were bisulfite converted (3) and eluted in 40 µl of TE buffer. 5 µl were added to a 20 µl PCR reaction containing primers specific to fully CpG methylated PTEN or Rb promoter DNA. A control set of primers designed to anneal to unmethylated PTEN or Rb promoter DNA were also used. Only the methylated-specific primer sets generated the appropriate sized PCR product.

S-adenosyl-L-(methyl-3H) methionine (AdoMet) Incorporation Assay: Incubation of 1 µg of CpG Methylated Jurkat Genomic DNA with 4 µl $^3$H AdoMet, and 8 units of CpG Methylase (M. SssI) for 4 hours at 37°C in 50 µl of 50 mM Tris-HCl (pH 7.8), 1mM EDTA and 1 mM dithiothreitol incorporated 0.01% of the total radioactivity.

References:
   Molecular Cloning: A Laboratory Manual,