

## CpG Methylated Jurkat Genomic DNA



1-800-632-7799  
info@neb.com  
www.neb.com



N4002S 011150617061

# N4002S

**15 µg**      **Lot: 0111506**      **Exp: 6/17**

**100 µg/ml**      **Store at -20°C**

**Description:** Human male Jurkat (human acute T-cell leukemia) genomic DNA that was enzymatically methylated with CpG Methylase (M. SssI), suitable as a positive control in the study of CpG dinucleotide methylation.

**Source:** Jurkat (acute T-cell leukemia) cells were grown to confluency in RPMI plus 10% fetal bovine serum. Genomic DNA was isolated by a standard genomic purification protocol (1), treated with CpG Methylase (M. SssI), phenol extracted and equilibrated to 10 mM Tris-HCl (pH 7.5) and 1 mM EDTA.

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### 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<sub>260/280</sub> Ratio:** 1.97

### Quality Control Assays

**Bisulfite conversion followed by Methylation-Specific PCR (MSP):** 10 µl (1 µg) of CpG Methyl-

ated 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 <sup>3</sup>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:

1. Sambrook, J. and Russell, D. (2001) *Molecular Cloning: A Laboratory Manual*,

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3. Frommer, M., et.al. (1992) PNAS USA 89, 1827–8131.

CERTIFICATE OF ANALYSIS

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