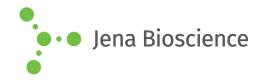
DATA SHEET





5-Methyl-dCTP

mdCTP, 5-mdCTP

5-Methyl-2'-deoxycytidine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1125S	10 μl (100 mM)
NU-1125L	5 x 10 μl (100 mM)

Structural formula of 5-Methyl-dCTP

For general laboratory use.

Shipping: shipped on gel packs **Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery **Molecular Formula:** C₁₀H₁₈N₃O₁₃P₃ (free acid) **Molecular Weight:** 481.18 g/mol (free acid)

Exact Mass: 481.01 g/mol (free acid)

CAS#: 22003-12-9
Purity: ≥ 95 % (HPLC)
Form: solution in water

Color: colorless to slightly yellow **Concentration:** 100 mM - 110 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 277 nm, ϵ 9.0 L mmol $^{-1}$ cm $^{-1}$ (Tris-HCl

pH 7.5)

Applications:

Incorporation into DNA by - PCR with *Taq* polymerase ^{in-house data}, [1-2]

Description:

5-methylated DNA probes can be used as methylation reference fragment $^{[1-2]}$ or for pull-down of 5-hmC binding proteins from cellular lysate $^{[3]}$.

Selected References:

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Zeschnigk et al. (2009) Massive parallel bisulfite sequencing of CG-rich DNA fragments reveals that methylation of many X-chromosomal CpG islands in female blood DNA is incomplete. Human Molecular Genetics 18 (8):1439.

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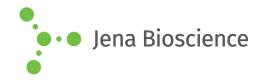
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DATA SHEET





3-Methyl-dCTP

mdCTP, 5-mdCTP 5-Methyl-2'-deoxycytidine-5'-triphosphate, Sodium salt

DNA fragments by PCR with 5-methyl-CTP. Nucleic Acids Res. 25 (20):4169.

Chen et al. (1993) Direct induction of DNA hypermethylation in sea urchin embryos by microinjection of 5-methyl dCTP stimulates early histone gene expression and leads to developmental arrest. Dev Biol. 155 (1):75.
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Nelson *et al.* (1993) Restriction endonuclease cleavage of 5-methyl-deoxycytosine hemimethylated DNA at high enzyme-to-substrate ratios. *Nucl. Acid. Res.* **21 (3)**:681.