

5-Methyl-2'-Deoxycytidine Kit

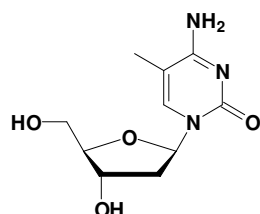
Cat.No.: NK-107

Kit Contents

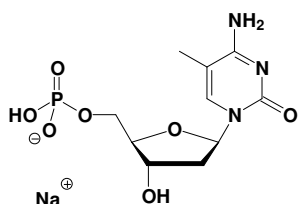
5-Methyl-2'-Deoxy-Cytidine Analogs	Cat. No.	Amount
5-Methyl-dC	N-1044	3 mg
5-Methyl-dCMP	NU-1137	100 Units
5-Methyl-dCDP	NU-1163	100 Units
5-Methyl-dCTP	NU-1125	100 Units

1 Unit = 1 µl of a 10 mM solution

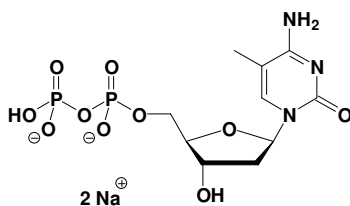
Structures



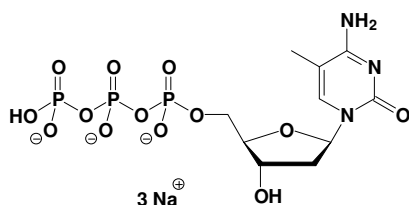
5-Methyl-dC



5-Methyl-dCMP



5-Methyl-dCDP



5-Methyl-dCTP

Introduction

5-Methyl-2'-Deoxy-Cytidines are used to inactivate restriction enzyme recognition sites and for gene expression and regulation studies.

Kit Description

The 5-Methyl-2'-Deoxy-Cytidine Kit contains a set of 4 typical 5-Methyl-2'-Deoxy-Cytidine analogs (Nucleoside, 5'-Mono, Di and Triphosphate).

Selected References:

Kamiya *et al.* (2004) Important amino acids in the phosphohydrolase module of *Escherichia coli* Orf135. *Biochem Biophys Res Commun.* **323** (3):1063.

Holliday *et al.* (2002) DNA methylation and epigenetic inheritance. *Methods.* **27**(2):179.

Kaito *et al.* (2001) Activation of the maternally preset program of apoptosis by microinjection of 5-aza-2'-deoxycytidine and 5-methyl-2'-deoxycytidine-5'-triphosphate in *Xenopus laevis* embryos. *Dev Growth Differ.* **43** (4):383.

Wong *et al.* (1997) A novel method for producing partial restriction digestion of DNA fragments by PCR with 5-methyl-dCTP. *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.

Storage and Stability

Short term exposure (up to 1 week cumulative) to ambient temperature is possible. Long term storage is recommended at < -20°C. If properly stored, Jena Bioscience guarantees optimal performance of the compounds for 12 months after date of delivery.