

7-Deaza-2'-Deoxy-Guanosine Kit

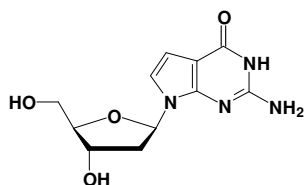
Cat.No.: NK-110

Kit Contents

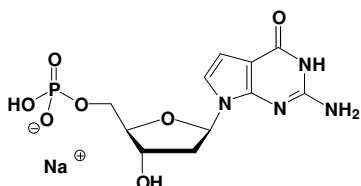
7-Deaza-2'-Deoxy-Guanosine Analogs	Cat. No.	Amount
7-Deaza-dG	N-1047	3 mg
7-Deaza-dGMP	NU-1177	100 Units
7-Deaza-dGDP	NU-1178	100 Units
7-Deaza-dGTP	NU-1179	100 Units

1 Unit = 1 µl of a 10 mM solution

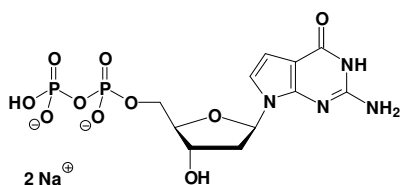
Structures



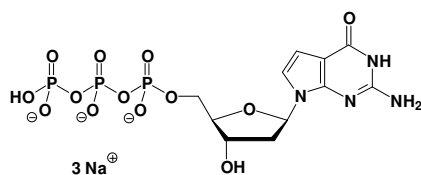
7-Deaza-dG



7-Deaza-dGMP



7-Deaza-dGDP



7-Deaza-dGTP

Introduction

7-Deaza-2'-Deoxy-Guanosines are able to replace their natural counterparts in PCR reactions, which leads to modified DNA with improved properties, such as lower melting temperature of the double strand. They are therefore used in DNA sequencing reactions, for PCR of GC-rich templates and to improve the DNA bands in polyacrylamide gel electrophoresis. Furthermore, they lead to increased stability of the helical DNA structure.

Kit Description

The 7-Deaza-2'-Deoxy-Guanosine Kit contains a set of 4 typical 7-Deaza-2'-Deoxy-Guanosine analogs (Nucleoside, 5'-Mono, Di and Triphosphate).

Selected References:

Mizusawa *et al.* (1986) Improvement of the dideoxy chain termination method of DNA sequencing by use of deoxy-7-deazaguanosine triphosphate in place of dGTP. *Nucleic Acids Research* **14** (3):1319.

Barr *et al.* (1986) 7-Deaza-2'-Deoxyguanosine-5'-Triphosphate: Enhanced Resolution in M13 Dideoxy Sequencing. *BioTechniques* **4**:428.

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.