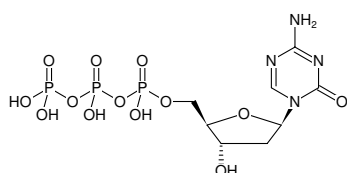


**5-Aza-dCTP**

Decitabine triphosphate

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

Cat. No.	Amount
NU-1118	20 mg



Structural formula of 5-Aza-dCTP

For research use only!**Shipping:** shipped on gel packs**Storage Conditions:** store at -20 °C**Shelf Life:** 12 months after date of delivery**Molecular Formula:** C₈H₁₅N₄O₁₃P₃ (free acid)**Molecular Weight:** 468.14 g/mol (free acid)**Exact Mass:** 467.98 g/mol (free acid)**CAS#:** 72052-96-1**Purity:** ≥ 95 % (HPLC at 267 nm)**Form:** solid**Color:** white to off-white**Spectroscopic Properties:** λ_{max} 244 nm, ε 7.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Determination of methyltransferase activity^[1]**Description:**

5-Aza-dCTP is a inhibitor of DNA methylation and an antileukemic agent. It has been used to reactivate silent tumor suppressor genes.

Specific Ligands:DNA-binding^[1]**Please note:**

- 1.) Contains at least 10 mg product
- 2.) The triazine moiety of decitabine is prone to acid- and base-catalyzed decomposition.^[2] To assure highest quality standards, the compound will be freshly prepared for you and shipped as a solid. Due to the limited stability, the price is higher than for stable nucleotides which can be kept in stock. We strongly suggest always to prepare fresh solutions for immediate use. For this, neutral buffers and low temperatures are most appropriate.

Selected References:

[1] Frauer *et al.* (2009) A versatile non-radioactive assay for DNA methyltransferase activity and DNA binding. *Nucleic Acids Research* **37** (3):e22.

[2] Lin *et al.* (1981) High-performance liquid chromatographic analysis of chemical stability of 5-aza-2'-deoxycytidine. *J. Pharm. Sci.* **70** (11):1228.

Lemaire *et al.* (2005) Enhancement of antineoplastic action of 5-aza-2'-deoxycytidine by zebularine on L1210 leukemia. *Anticancer Drugs*. **16** (3):301.

Parker *et al.* (1987) Inhibition of DNA primase by nucleoside triphosphates and their arabinofuranosyl analogs. *Mol. Pharmacol.* **31** (2):146.

McIntosh *et al.* (1985) Synthesis and characterization of poly[d (G-z5C)]. B-Z transition and inhibition of DNA methylase. *Biochemistry* **24** (18):4806.

Momparler *et al.* (1984) Kinetic interaction of 5-AZA-2'-deoxycytidine-5'-monophosphate and its 5'-triphosphate with deoxycytidylate deaminase. *Mol. Pharmacol.* **25** (3):436.

Bouchard *et al.* (1983) Incorporation of 5-Aza-2'-deoxycytidine-5'-triphosphate into DNA. Interactions with mammalian DNA polymerase alpha and DNA methylase. *Mol. Pharmacol.* **24** (1):109.

Bouchard *et al.* (1983) Incorporation of 5-Aza-2'-deoxycytidine-5'-triphosphate into DNA. Interactions with mammalian DNA polymerase alpha and DNA methylase. *Mol. Pharmacology* **24** (1):109.