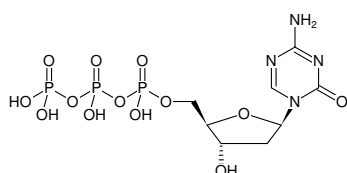


**5-Aza-dCTP**

Decitabine triphosphate

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

Cat. No.	Amount
NU-1118	20 mg



Structural formula of 5-Aza-dCTP

For general laboratory use.**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)**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] **Always prepare a fresh solution for immediate use.** 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.Mompalmer *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.