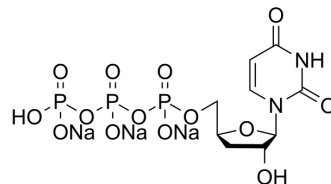


3'-Deoxyuridine-5'-triphosphate trisodium

Cat. No.:	HY-135780A
Molecular Formula:	C ₉ H ₁₂ N ₂ Na ₃ O ₁₄ P ₃
Molecular Weight:	534.09
Target:	Nucleoside Antimetabolite/Analog; DNA/RNA Synthesis; Endogenous Metabolite
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 20 mg/mL (37.45 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.8723 mL	9.3617 mL	18.7234 mL
		5 mM		0.3745 mL	1.8723 mL	3.7447 mL
	10 mM		0.1872 mL	0.9362 mL	1.8723 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (93.62 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	3'-Deoxyuridine-5'-triphosphate trisodium (3'-dUTP trisodium) is a nucleotide analogue that inhibits DNA-dependent RNA polymerases I and II. 3'-Deoxyuridine-5'-triphosphate trisodium strongly and competitively inhibits the incorporations of UTP into RNA with a K _i value of 2.0 μM ^[1] .
In Vitro	3'-Deoxyuridine-5'-triphosphate (3'-dUTP) is synthesized starting from cordycepin in good yield. 3'-Deoxyuridine-5'-triphosphate strongly and competitively inhibits the incorporations of UTP into RNA by the RNA polymerases. 3'-Deoxyuridine-5'-triphosphate will be useful in studies at the molecular level on the relationship of template and substrate in RNA synthesis with chromatin, isolated nuclei or permeable cells, because it does not have any effect on poly (rA) synthesis [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. M Saneyoshi, et al. Inhibitory Effects of 3'-deoxycytidine 5'-triphosphate and 3'-deoxyuridine 5'-triphosphate on DNA-dependent RNA Polymerases I and II Purified From Dictyostelium Discoideum Cells. Nucleic Acids Res. 1981 Jul 10;9(13):3129-38.

Caution: Product has not been fully validated for medical applications. For research use only.

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