## **Product** Data Sheet

## 3'-Deoxyuridine-5'-triphosphate

Cat. No.: HY-135780 CAS No.: 69199-40-2 Molecular Formula:  $C_9H_{15}N_2O_{14}P_3$  Molecular Weight: 468.14

Target: DNA/RNA Synthesis; Endogenous Metabolite; Nucleoside Antimetabolite/Analog

Pathway: Cell Cycle/DNA Damage; Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	3'-Deoxyuridine-5'-triphosphate (3'-dUTP) is a nucleotide analogue that inhibits DNA-dependent RNA polymerases I and II. 3'-Deoxyuridine-5'-triphosphate strongly and competitively inhibits the incorporations of UTP into RNA with a $K_i$ value of 2.0 $\mu$ M <sup>[1]</sup> .
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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA