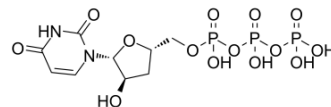


## 3'-Deoxyuridine-5'-triphosphate

Cat. No.:	HY-135780
CAS No.:	69199-40-2
Molecular Formula:	C <sub>9</sub> H <sub>15</sub> N <sub>2</sub> O <sub>14</sub> P <sub>3</sub>
Molecular Weight:	468.14
Target:	Nucleoside Antimetabolite/Analog; DNA/RNA Synthesis; Endogenous Metabolite
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

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

### 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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