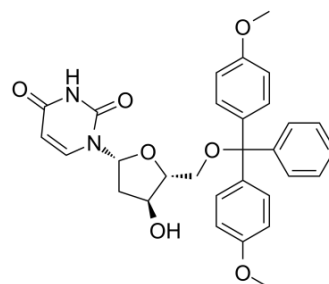


5'-O-(4,4'-Dimethoxytrityl)-2'-deoxyuridine

Cat. No.:	HY-W097792
CAS No.:	23669-79-6
Molecular Formula:	C ₃₀ H ₃₀ N ₂ O ₇
Molecular Weight:	530.57
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (188.48 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	1.8848 mL	9.4238 mL	18.8477 mL
		5 mM	0.3770 mL	1.8848 mL	3.7695 mL
		10 mM	0.1885 mL	0.9424 mL	1.8848 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	5'-O-(4,4'-Dimethoxytrityl)-2'-deoxyuridine (5'-O-DMT-dU) is a competitive inhibitor of E. coli dUTP nucleotidohydrolase (dUTPase), with the K _i higher than 1000 μM. 5'-O-(4,4'-Dimethoxytrityl)-2'-deoxyuridine can be used in machine-assisted DNA synthesis by synthesizing nucleosidic phosphoramidite blocks ^{[1][2]} .
IC₅₀ & Target	Ki: >1000 μM (E. coli dUTPase) ^[1]

REFERENCES

[1]. Hidalgo-Zarco F, et, al. Kinetic properties and inhibition of the dimeric dUTPase-dUDPase from Leishmania major. Protein Sci. 2001 Jul;10(7):1426-33.

[2]. Hovinen J, et, al. Versatile strategy for oligonucleotide derivatization. Introduction of lanthanide(III) chelates to oligonucleotides. Org Lett. 2001 Aug 9;3(16):2473-6.

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

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