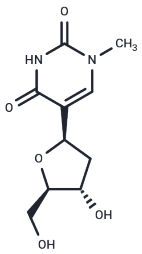
Data Sheet (Cat.No.T19530)

TargetMol

Pseudothymidine

Chemical Properties



CAS No. : 65358-15-8

Formula: C10H14N2O5

Molecular Weight: 242.23

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Pseudothymidine, a C-nucleoside analog of thymidine, is a modified nucleic acid component replacing the natural 2-deoxyribose sugar with a carbocyclic moiety in the thymine nucleoside structure, enhancing its stability and resistance to enzymatic degradation while maintaining the ability to participate in nucleic acid synthesis and regulatory processes.
Targets(IC50)	Nucleoside Antimetabolite/Analog,Others,HIV Protease

Solubility Information

Solubility	DMSO: 61.17 mg/mL (252.53 mM),Sonication is recommended. 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2.5 mg/mL (10.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1283 mL	20.6415 mL	41.2831 mL
5 mM	0.8257 mL	4.1283 mL	8.2566 mL
10 mM	0.4128 mL	2.0642 mL	4.1283 mL
50 mM	0.0826 mL	0.4128 mL	0.8257 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

S Lutz, et al. An in vitro screening technique for DNA polymerases that can incorporate modified nucleotides. Pseudo-thymidine as a substrate for thermostable polymerases. Nucleic Acids Res. 1999 Jul 1; 27(13): 2792-2798.
Havemann SA, et al. Incorporation of multiple sequential pseudothymidines by DNA polymerases and their impact on DNA duplex structure. Nucleosides Nucleotides Nucleic Acids. 2008 Mar;27(3):261-78.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481