Data Sheet (Cat.No.T13645)

TargetMol

Deoxypseudouridine

Chemical Properties

CAS No. : 39967-60-7

Formula: C9H12N2O5

Molecular Weight: 228.20

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Deoxypseudouridine is a nucleoside analog, the deoxy form of pseudouridine, and a structural variant of uridine. Deoxypseudouridine is commonly used in studies of nucleic acid structural modifications and their effects on enzymatic reactions.
Targets(IC50)	Nucleoside Antimetabolite/Analog
In vitro	Deoxypseudouridine is a nucleotide analog. The ethidium bromide staining of the gel showed that both the control DNA and analog DNA samples (including deoxypseudodududuridin) had the same degree of digestion of the carrier DNA. This indicates that the restriction enzyme is as active as unmodified (control) DNA in the presence of modified DNA substrates (including deoxypseudo-rhododendronine). Enzymes that do not contain AT base pairs in their recognition sequences will effectively limit DNA replaced by deoxypseudoduridine or deoxytubercidin like controls.

Solubility Information

Solubility	DMSO: 29.60 mg/mL (129.71 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2.00 mg/mL (8.76 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.3821 mL	21.9106 mL	43.8212 mL
5 mM	0.8764 mL	4.3821 mL	8.7642 mL
10 mM	0.4382 mL	2.1911 mL	4.3821 mL
50 mM	0.0876 mL	0.4382 mL	0.8764 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bodnar JW, et al. Effect of nucleotide analogs on the cleavage of DNA by the restriction enzymes AluI, DdeI, HinfI, RsaI, and TaqI. J Biol Chem. 1983 Dec 25;258(24):15206-13.