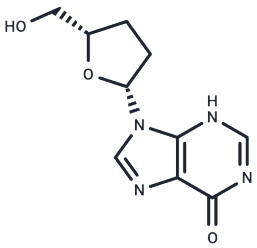
Data Sheet (Cat.No.T2578)

TargetMol

Didanosine

Chemical Properties



CAS No. : 69655-05-6

Formula: C10H12N4O3

Molecular Weight: 236.23

Appearance: no data available

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

Biological Description

Description	Didanosine (ddI) is a nucleoside reverse transcriptase inhibitor analog of adenosine (IC50: 0.49 μM).
Targets(IC50)	HIV Protease,Reverse Transcriptase
In vivo	In cultured human muscle cells, Didanosine induced accumulation of cytoplasmic lipid droplets, increased lactate production, and decreased SDH (part of complex II) and COX (complex IV) activity. In HIV target cells, Didanosine was converted to its active form, deoxyadenosine-5'-triphosphate (ddATP). In dissociated DRG cells in culture, Didanosine dose-dependently induced reductions in the number of neurites, the length of each neurite in the longest neurite, and the total length of the neurite. In dissociated DRG neurons, Didanosine dose-dependently induced neurite retraction or axon loss, suggesting that desipramine is useful in the development of peripheral neuropathy. In cultured human TK6 lymphoblastoid cells, Didanosine induced mutagenicity of the thymidine kinase gene induced by zidovudine.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 70 mg/mL (296.32 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2332 mL	21.1658 mL	42.3316 mL
5 mM	0.8466 mL	4.2332 mL	8.4663 mL
10 mM	0.4233 mL	2.1166 mL	4.2332 mL
50 mM	0.0847 mL	0.4233 mL	0.8466 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

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Chappell D, et al. Anesthesiology, 2007, 107(5), 776-784.
Walker UA, et al. Hepatology, 2004, 39(2), 311-317.
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