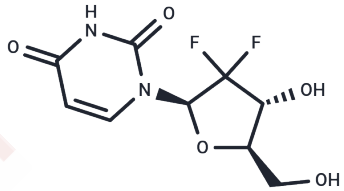
Data Sheet (Cat.No.T67291)

TargetMol

2′,2′-Difluorodeoxyuridine

Chemical Properties



CAS No. : 114248-23-6

Formula: C9H10F2N2O5

Molecular Weight: 264.18

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	2′,2′-Difluorodeoxyuridine (dFdU), the major metabolite of Gemcitabine, exhibits anticancer and antitumor activities, shows radiosensitization under hypoxic conditions, and can be used to study pancreatic cancer.
Targets(IC50)	Apoptosis,Drug Metabolite

Solubility Information

Solubility	DMSO: 80 mg/mL (302.82 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: 5 mg/mL (18.93 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	3.7853 mL	18.9265 mL	37.853 mL
5 mM	0.7571 mL	3.7853 mL	7.5706 mL
10 mM	0.3785 mL	1.8926 mL	3.7853 mL
50 mM	0.0757 mL	0.3785 mL	0.7571 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

Pauwels B, et al. The radiosensitising effect of difluorodeoxyuridine, a metabolite of gemcitabine, in vitro. Cancer Chemother Pharmacol. 2006 Aug;58(2):219-28.