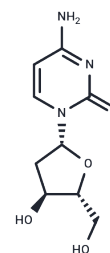


2'-Deoxycytidine

Chemical Properties

CAS No. :	951-77-9
Formula:	C ₉ H ₁₃ N ₃ O ₄
Molecular Weight:	227.22
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	2'-Deoxycytidine is one of the major nucleosides of DNA consisting of cytosine and deoxyribose and inhibits the biological effects of bromodeoxyuridine (BrdU). The nucleoside consists only of a pentose sugar attached to a purine or pyrimidine base and has no phosphate group. When N1 is attached to C1 of deoxyribose, deoxyribosides and nucleotides are formed from cytosine and deoxyribose; deoxycytidine monophosphate (dCMP), deoxycytidine diphosphate (dCDP), and deoxycytidine triphosphate (dCTP). cTP is the source of cytosine in RNA (ribonucleic acid) and deoxycytidine triphosphate (dCTP) is the source of deoxycytidine in DNA (deoxyribonucleic acid). Itaconic acid is a polymer.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 250 mg/mL (1100.26 mM), Sonication is recommended. H ₂ O: 50 mg/mL (220.05 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 mg/mL (8.8 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.401 mL	22.0051 mL	44.0102 mL
5 mM	0.8802 mL	4.401 mL	8.802 mL
10 mM	0.4401 mL	2.2005 mL	4.401 mL
50 mM	0.088 mL	0.4401 mL	0.8802 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

Horn D, et al. Inhibition of biological effects of bromodeoxyuridine by deoxycytidine: correlation with decreased incorporation of bromodeoxyuridine into DNA. Somatic Cell Genet. 1976 Sep;2(5):469-81.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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