Data Sheet (Cat.No.T15280)

TargetMol

Fiacitabine

Chemical Properties

CAS No. : 69123-90-6

Formula: C9H11FIN3O4

Molecular Weight: 371.1

Appearance: no data available

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

Biological Description

Description	Fiacitabine (NSC-382097) is a selective inhibitor of DNA replication of the herpes simplex virus(HSV) (IC50: 2.5 nM and 12.6 nM for HSV1 and HSV2, respectively).
Targets(IC50)	HSV
In vitro	FIAC was active at much lower concentrations than arabinosylcytosine, iododeoxyuridine, and arabinosyladenine. It was slightly more active against herpes simplex virus type 1 than acycloguanosine and slightly more toxic to normal cells. FIAC was about 8,000 times more active against the replication of wild-type herpes simplex virus type 1 than against a mutant strain lacking the expression of a virus-specified thymidine kinase. HSV FIAC suppressed by 90% the replication of various strains of herpes simplex virus types 1 and 2 at concentrations of 0.0025 to 0.0126 microM. Cytotoxicity was minimal, as determined by trypan blue dye exclusion with norman Vero, WI-38, and NC-37 cell proliferation; the 50% inhibitory dose was 4 to 10 microM in a 4-day assay [2].

Solubility Information

Solubility	DMSO: 35 mg/mL (94.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6947 mL	13.4735 mL	26.9469 mL
5 mM	0.5389 mL	2.6947 mL	5.3894 mL
10 mM	0.2695 mL	1.3473 mL	2.6947 mL
50 mM	0.0539 mL	0.2695 mL	0.5389 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

Allaudeen HS, et al. Selective inhibition of DNA replication in herpes simplex virus infected cells by 1-(2'-deoxy-2'-fluoro-beta-D-arabinofuranosyl)-5-iodocytosine. J Biol Chem. 1982 Oct 25;257(20):11879-82.
Lopez C, et al. 2'-fluoro-5-iodo-aracytosine, a potent and selective anti-herpesvirus agent. Antimicrob Agents Chemother. 1980 May;17(5):803-6.

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