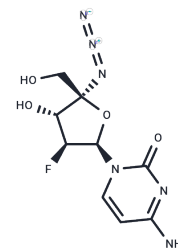


Azvudine

Chemical Properties

CAS No. :	1011529-10-4
Formula:	C ₉ H ₁₁ FN ₆ O ₄
Molecular Weight:	286.22
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	Azvudine (FNC) is a potent nucleoside reverse transcriptase inhibitor (NRTI), with antiviral activity on HIV, HBV and HCV. Azvudine inhibits NRTI-resistant viral strains. Azvudine exerts highly potent inhibition on HIV-1 (EC50s ranging from 0.03 to 6.92 nM) and HIV-2 (EC50s ranging from 0.018 to 0.025 nM).
Targets(IC50)	HCV Protease,HIV Protease,Reverse Transcriptase,HBV
In vitro	Azvudine is sensitive to NRTIs-resistant strain HIV-174V, PIs-resistant strains HIV-1L10R/M46I/L63P/V82T/I84V and HIV-1RF V82F/184V, and FIs-resistant strain pNL4-3 gp41 (36G) V38A/N42T. The EC50 values of Azvudine against these resistant strains are 0.11, 0.14, 0.37 and 0.36 nM respectively[1]. Azvudine displays strong inhibition on wild-type HIV-1IIIB and HIV-1RF with an EC50 ranging from 30 to 110 pM. The EC50 values of Azvudine against HIV-1KM018, HIV-1TC-1 and HIV-1WAN T69N are 6.92, 0.34 and 0.45 nM, respectively.

Solubility Information

Solubility	DMSO: 245 mg/mL (855.98 mM),Sonication is recommended. H2O: 50 mg/mL (174.69 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: 1 mg/mL (3.49 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	3.4938 mL	17.4691 mL	34.9382 mL
5 mM	0.6988 mL	3.4938 mL	6.9876 mL
10 mM	0.3494 mL	1.7469 mL	3.4938 mL
50 mM	0.0699 mL	0.3494 mL	0.6988 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

Wang RR, et al. Azvudine, a novel nucleoside reverse transcriptase inhibitor showed good drug combination features and better inhibition on drug-resistant strains than lamivudine in vitro. PLoS One. 2014 Aug 21;9(8): e105617.

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