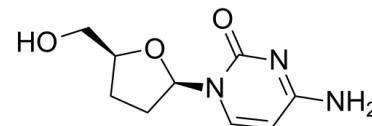


Data Sheet

Product Name:	Zalcitabine
Cat. No.:	CS-1110
CAS No.:	7481-89-2
Molecular Formula:	C ₉ H ₁₃ N ₃ O ₃
Molecular Weight:	211.22
Target:	HIV; Reverse Transcriptase
Pathway:	Anti-infection
Solubility:	DMSO : 62.5 mg/mL (295.90 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Zalcitabine is a potent nucleoside analogue reverse transcriptase inhibitor used in the treatment of **HIV** infection. IC₅₀ & Target: Target: HIV **In Vitro**: Zalcitabine is a dideoxynucleoside antiretroviral agent that is phosphorylated to the active metabolite 2',3'-dideoxycytidine 5'-triphosphate (ddCTP) within both uninfected and HIV-infected cells. At therapeutic concentrations, ddCTP inhibits HIV replication by inhibiting the enzyme reverse transcriptase and terminating elongation of the proviral DNA chain^[1]. Zalcitabine exhibits the inhibition effect on the cellular uptake of [3H]-PAH in CHO/hOAT1 cells with an IC₅₀ value of 1.23 mM. Furthermore, the cellular uptake of zalcitabine increased threefold with the enhancement of hOATI activity in CHO/hOAT1 cells^[2].

References:

[1]. Adkins JC, et al. Zalcitabine. An update of its pharmacodynamic and pharmacokinetic properties and clinical efficacy in the management of HIV infection. *Drugs*. 1997 Jun;53(6):1054-80

[2]. Jin MJ, et al. Interaction of zalcitabine with human organic anion transporter 1. *Pharmazie*. 2006 May;61(5):491-2.

CAIndexNames:

Cytidine, 2',3'-dideoxy-

SMILES:

OC[C@@H]1CC[C@H](N2C(N=C(C=C2)N)=O)O1

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA