

# Zalcitabine

**Catalog No: tcsc1110**



## Available Sizes

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

7481-89-2

**Formula:**

$C_9H_{13}N_3O_3$

**Pathway:**

Anti-infection;Anti-infection

**Target:**

Reverse Transcriptase;HIV

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 16.67 mg/mL (78.92 mM; Need ultrasonic and warming)

**Alternative Names:**

ddC; Dideoxycytidine; 2',3'-Dideoxycytidine

**Observed Molecular Weight:**

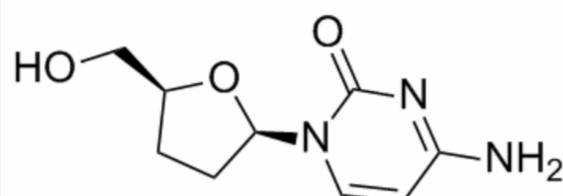
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## Product Description

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<sup>[1]</sup>. Zalcitabine exhibits the inhibition effect on the cellular uptake of [3H]-PAH in CHO/hOAT1 cells with an IC<sub>50</sub> value of 1.23 mM. Furthermore, the cellular uptake of zalcitabine increased threefold with the enhancement of hOAT1 activity in CHO/hOAT1 cells<sup>[2]</sup>.



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