

# Cladribine

**Catalog No: tcsc2057**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

4291-63-8

**Formula:**

$C_{10}H_{12}ClN_5O_3$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Adenosine Deaminase

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : 10 mg/mL (35.00 mM; Need ultrasonic); DMSO : ≥ 30 mg/mL (105.01 mM)

**Alternative Names:**

2-Chloro-2'-deoxyadenosine;CldAdo;2CdA

**Observed Molecular Weight:**

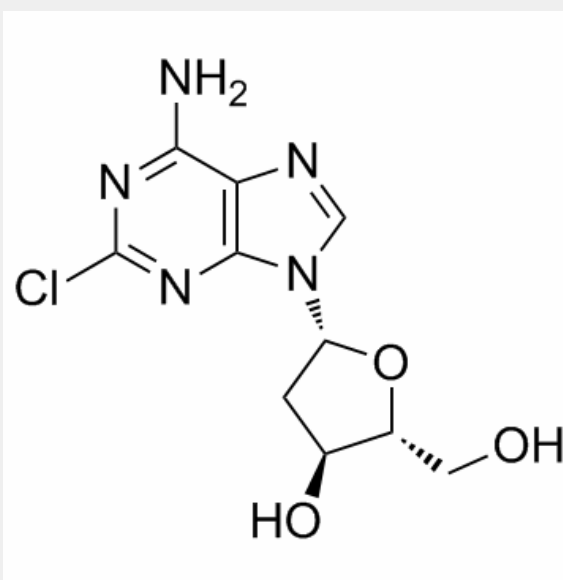
285.69

## Product Description

Cladribine is an adenosine deaminase inhibitor used to treat hairy cell leukemia and multiple sclerosis.

Target: Adenosine Deaminase

Cladribine possesses concentration-dependent apoptosis-inducing potential in the HSB2 cells. Cladribine inhibits growth of primary mast cell (MC) and the MC line HMC-1 in a dose-dependent manner, with lower IC<sub>50</sub> values recorded in HMC-1.2 cells harboring KIT D816V compared to HMC-1.1 cells lacking KIT D816V. Cladribine (0.7-3.5 mM) and/or diltiazem (2.4 mM), is injected intraperitoneally into adult zebrafish and red blood cell (RBC) lysates are assayed by HPLC for levels of purine nucleotides (e.g. ATP), potential biomarkers of cardiovascular health. Diltiazem increased RBC ATP concentrations, which are inhibited by co-injection of cladribine.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!