

# Clofarabine

**Catalog No: tcsc0373**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

123318-82-1

**Formula:**

$C_{10}H_{11}ClFN_5O_3$

**Pathway:**

Cell Cycle/DNA Damage;Autophagy

**Target:**

Nucleoside Antimetabolite/Analog;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

303.68

## Product Description

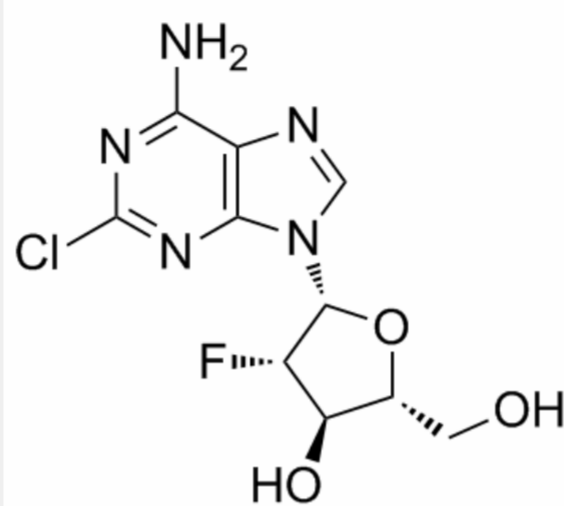
Clofarabine(Clofar; Clofarex) inhibits the enzymatic activities of ribonucleotide reductase (IC50 = 65 nM) and DNA polymerase.

IC50 Value: 65 nM

Target:

in vitro: Clofarabine is a second generation purine nucleoside analog with antineoplastic activity. It is phosphorylated intracellularly, which inhibits the enzymatic activities of ribonucleotide reductase (IC<sub>50</sub> = 65 nM) and DNA polymerase, resulting in inhibition of DNA repair and synthesis of DNA and RNA. This nucleoside analog also disrupts mitochondrial function and membrane integrity, resulting in the release of pre-apoptotic factors, including cytochrome C and apoptotic-inducing factor, which activate apoptosis.

in vivo: Clofarabine is used for treating relapsed or refractory acute lymphoblastic leukaemia (ALL) in children, after at least two other types of treatment have failed.



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