

Methotrexate

Catalog No: tcsc1732



Available Sizes

Size: 100mg

Size: 500mg



Specifications

CAS No:

59-05-2

Formula:

$C_{20}H_{22}N_8O_5$

Pathway:

Cell Cycle/DNA Damage;Antibody-drug Conjugate/ADC Related

Target:

Antifolate;ADC Cytotoxin

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 30 mg/mL (66.02 mM)

Alternative Names:

Amethopterin;CL14377;WR19039

Observed Molecular Weight:

454.44

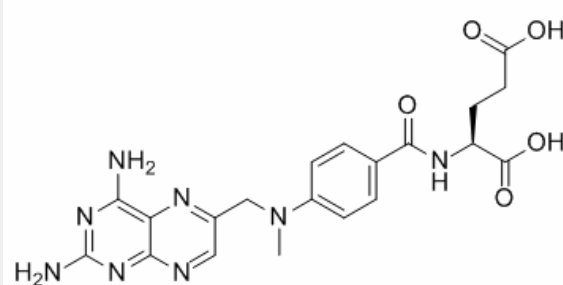
Product Description

Methotrexate is a traditional **folate** antagonist, with median **IC₅₀** of 78 nM for a 120 h drug exposure in a panel of six pediatric leukemia and lymphoma cell lines using the sulforhodamine B assay.

IC50 & Target: Antifolate^[1]

In Vitro: Methotrexate (MTX), which has a more predictable toxicity profile than aminopterin, has become a cornerstone of the treatment for childhood acute lymphoblastic leukemia (ALL) and for non-Hodgkins lymphoma^[1].

In Vivo: Methotrexate (MTX) exposure reduces thymus and spleen indices of mice. Methotrexate markedly decreases white blood cells, thymic and splenic lymphocytes at dose ≥ 5 mg/kg. However, there is a significant difference between the treatment plus control group and the model group (p[2]).



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