

Folinic acid (Calcium)

Catalog No: tcsc1363



Available Sizes

Size: 100mg

Size: 500mg



Specifications

CAS No:

1492-18-8

Formula:

$C_{20}H_{21}CaN_7O_7$

Pathway:

Cell Cycle/DNA Damage

Target:

Antifolate

Purity / Grade:

>98%

Solubility:

H₂O : ≥ 200 mg/mL (391.01 mM)

Alternative Names:

Leucovorin Calcium;Calcium Folate

Observed Molecular Weight:

511.5

Product Description

Leucovorin Calcium is a reduced folic acid.

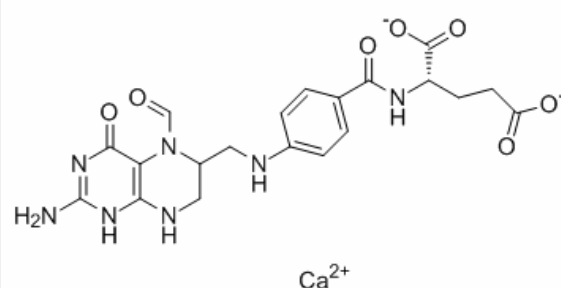
IC50 Value: 30 μ M for zcSHMT and 70 μ M for zmSHMT [2]

Target: Antifolate

in vitro: Increasing concentrations of leucovorin (N5-CHO-THF) inhibit both zcSHMT and hcSHMT activities substantially, yet to a lesser extent than zmSHMT. The IC50 of leucovorin is approximately 30 μ M for zcSHMT and higher than 70 μ M for zmSHMT. The differential inhibition is evident with the presence of 10 μ M leucovorin, the concentration estimated in serum in a high-dose leucovorin rescue regimen [2].

in vivo: Following intravenous administration, peak plasma concentrations of (6R) LV, (6S) LV, and 5-CH3 THF were 148 \pm 32, 59.1 \pm 22, and 17.8 \pm 17 microM, respectively. During oral administration of LV, virtually no (6S) LV appeared in the plasma. Steady-state plasma concentrations of (6R) LV and 5-CH3 THF were approximately 1.5 \pm 0.23 and 2.8 \pm 0.41 microM, respectively [1]. 24 fasted subjects were given 4 of a series of 5 single test doses between 20 and 100 mg, at 1-week intervals, of 5-formyl-THF as an oral solution of leucovorin calcium. Six separate subjects received 200 mg iv and po in a 2-way crossover. Blood and urine samples were collected over 24 hours for differential microbiological folate assays using Lactobacillus casei and Streptococcus faecalis. Using L casei activity to measure total serum folates, the area under the concentration-time curve from 0 to infinite time (AUC[0-infinity]) was calculated. Relative bioavailabilities were 78%, 62%, 49%, and 42% for the 40-, 60-, 80-, and 100-mg doses, respectively [3].

Clinical trial: Leucovorin and Fluorouracil With or Without SU-5416 in Treating Patients With Metastatic Colorectal Cancer . Phase 3



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