Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 Folinate

Observed Molecular Weight:
511.5

Product Description

Leucovorin Calcium is a reduced folic acid.

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IC50 Value: 30 μM for zcSHMT and70 μM 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 μM for zcSHMT and higher than 70 μM for zmSHMT. The differential inhibition is evident with the presence of 10 μM 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 +/- 32, 59.1 +/- 22, and 17.8 +/- 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 +/- 0.23 and 2.8 +/- 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