**Proteins** 

# **Product** Data Sheet

# Levoleucovorin Calcium

Cat. No.: HY-13667 CAS No.: 80433-71-2 Molecular Formula:  $C_{20}H_{21}CaN_7O_7$ 

Molecular Weight: 511.5 Antifolate Target:

Pathway: Cell Cycle/DNA Damage

Storage: 4°C, sealed storage, away from moisture and light

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 10 mg/mL (19.55 mM; Need ultrasonic) DMSO: < 1 mg/mL (insoluble or slightly soluble)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg      | 10 mg      |
|------------------------------|-------------------------------|-----------|-----------|------------|
|                              | 1 mM                          | 1.9550 mL | 9.7752 mL | 19.5503 mL |
|                              | 5 mM                          | 0.3910 mL | 1.9550 mL | 3.9101 mL  |
|                              | 10 mM                         | 0.1955 mL | 0.9775 mL | 1.9550 mL  |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

Description

Levoleucovorin Calcium (Calcium levofolinate), a levo isoform of <u>Leucovorin Calcium</u> (HY-13664), possesses antineoplastic  $effects.\ Levoleucovorin\ Calcium\ is\ also\ an\ augmentor\ of\ \underline{5-fluorouracil}\ (HY-90006)\ cytotoxicity\ against\ cancer^{[1][2]}.$ 

In Vivo

Levoleucovorin Calcium (6, 20 or 60 mg/kg/day; i.v.; for 4 weeks) enhances the toxicity of 5-Fluorouracil [2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| Animal Model:   | Crj:CD(SD)BR rats (5 weeks) <sup>[2]</sup>  |  |
|-----------------|---|--|
| Dosage:         | 6, 20 or 60 mg/kg/day   |  |
| Administration: | i.v.; for 4 weeks (combined with 10 mg/kg/day <u>5-Fluorouracil</u> )   |  |
| Result:         | Decreased the RBC counts, increased extramedullary hematopoiesis and enhanced the suppression of lymphatic organs.  Induced the potentiation in the toxicity of <u>5-Fluorouracil</u> appeared to be mainly immuno- |  |

suppression and myelosuppression, which were related to the anti-tumor activity of 5-Fluorouracil.

## **CUSTOMER VALIDATION**

• J Mol Med (Berl). 2019 Aug;97(8):1183-1193.

See more customer validations on  $\underline{www.MedChemExpress.com}$ 

#### **REFERENCES**

[1]. National Center for Biotechnology Information. PubChem Compound Summary for CID 135500522, Levoleucovorin calcium.

[2]. Murakami Y, et al. Effects of levofolinate calcium on subacute intravenous toxicity of 5-fluorouracil in rats. J Toxicol Sci. 1998 May;23 Suppl 1:11-29.

Caution: Product has not been fully validated for medical applications. For research use only.

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