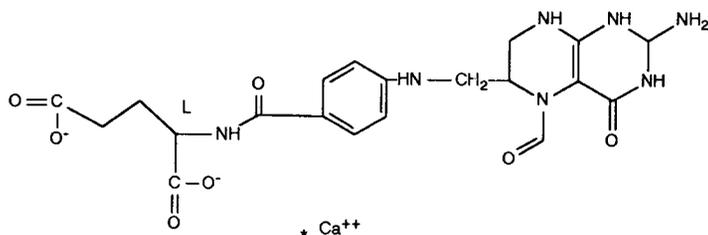


LEUCOVORIN CALCIUM

NSC - 3590



Chemical Name:

N-[4-[[[2-Amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyloxy)methyl]amino]benzoyl]-*L*-glutamic acid, calcium salt (1:1), (*R,S*)-

Other Names:

Citrovorum Factor; Folinic Acid; Calcium Leucovorin

CAS Registry Number: 1492-18-8

Molecular Formula: C₂₀H₂₃CaN₇O₇

M.W.: 511.5

Approximate Solubility:

(mg/mL)

DMSO	<< 1
H ₂ O	100
0.1 N NaOH	< 20

Stability:

Bulk:

Calcium leucovorin was stable in bulk form after 4 weeks storage at 60 °C (HPLC).

Solution:

Leucovorin in 0.1 N NaOH (pH 13) and in deionized water (pH 6) was stable at room temperature under laboratory illumination for at least 24 hours (HPLC).

Ultraviolet Absorption:

(0.1 N NaOH)

$$\lambda_{\max} = 282 \pm 2 \text{ nm}$$

$$\epsilon = 23,000 - 26,500$$

High Performance Liquid Chromatography:

Column:	30 cm x 4 mm i.d. Spherisorb ODS
Mobile Phase:	15% MeOH in 0.1 M KH_2PO_4 , pH adjusted to 4.0
Flow Rate:	1.5 mL/min
Detection:	UV at 254 nm
Sample Preparation:	1 mg/mL in water or internal standard solution
Internal Standard:	Folic acid (1 mg/mL in 0.02 N NaOH)
Retention Volume:	12.0 mL (NSC -3590) 20.2 mL (I.S.)

Optical Rotation:

(c = 1, H₂O)

$$[\alpha]_D^{20} = 13.0 \pm 2^\circ$$

Toxicity Data:

Mouse(iv): LD₅₀: 732 mg/kg

Drugs in Japan. Ethical Drugs. 6,910,(1982)