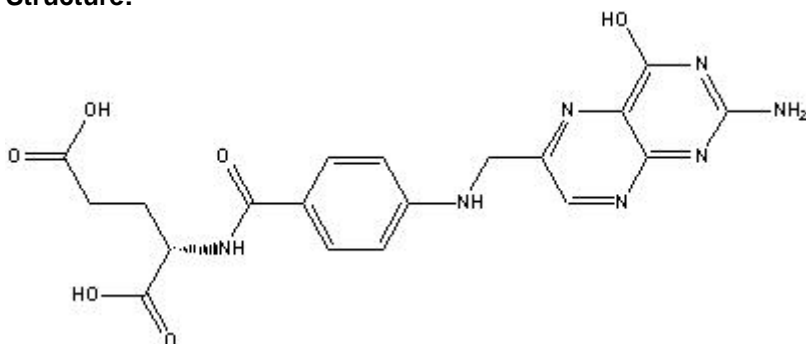


TECHNICAL INFORMATION

Catalog Number: 194665
Folic Acid, Cell Culture Reagent

Structure:



Molecular Formula: C₁₉H₁₉N₇O₆

Molecular Weight: 441.4

CAS # 59-30-3

Synonym: Pteroylglutamic Acid; N-[4-[[[(2-Amino-1,4-dihydro-4-oxo-6-pteridiny)]methyl] amino]benzoyl]-L-glutamic acid; N-[p-[[[(2-amino-4-hydroxy-6-pteridiny)] methyl]amino] benzoyl] glutamic acid; N-(p-[(2-amino-4-hydroxypyrimido[4,5-b]pyrazin-6-yl) methylamino] benzoyl) glutamic acid; PGA; Liver Lactobacillus casei factor; Vitamin Bc; Vitamin M; Folsure

Physical Description: Yellow to Orange powder

Description: Hematopoietic vitamin present, free or combined with one or more additional molecules of L-(+)-glutamic acid, in liver, kidney, mushrooms, spinach, yeast, green leaves, and grasses.

Solubility: Very slightly soluble in cold water (0.0016 mg/ml at 25°C), soluble to about 1% in boiling water. Slightly soluble in methanol, appreciably less soluble in ethanol and butanol. Insoluble in acetone, chloroform, ether, benzene. Relatively soluble in acetic acid, phenol, pyridine, solutions of alkali hydroxides and carbonates. Soluble in hot dilute HCl and H₂SO₄. A suspension of 1 g folic acid in 10 ml water has a pH of 4.0-4.8. Aqueous solutions prepared with sodium bicarbonate have a pH between 6.5 and 6.8.

References:

- Merck Index, **12th Ed.**, No. 4253.
- Mitchell, et. al., *J. Am. Chem. Soc.*, **v. 63**, 2284 (1941).
- Pfiffner, et. al., *J. Am. Chem. Soc.*, **v. 69**, 1476 (1947)