
Product Data Sheet

Product Name: Sparfosic acid

Cat. No.: GC63604

Chemical Properties

Cas. No. 51321-79-0

Formula $C_6H_{10}NO_8P$

M.Wt 255.12

Solubility Water : 125 mg/mL (489.97 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Sparfosic acid is a DNA antimetabolite agent and a potent inhibitor of aspartate transcarbamoyl transferase. Sparfosic acid has anti-tumor activity. Aspartate transcarbamoyl transferase catalyzes the second step of de novo pyrimidine biosynthesis[1][2].

Sparfosic acid (PALA) causes apoptosis in the resistant Br1 cells[1]. Sparfosic acid (300 μ M) shows progressive accumulation of cells in S phase and activation of an apoptotic pathway leading to cell death[1].

[1]. Wang J, et al. Elevated cyclin A associated kinase activity promotes sensitivity of metastatic human cancer cells to DNA antimetabolite drug. *Int J Oncol.* 2015 Aug;47(2):782-90.

[2]. Angela D. Morris, et al. A New, Efficient, Two Step Procedure for the Preparation of the Antineoplastic Agent Sparfosic Acid.

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

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