
Product Data Sheet

Product Name: DL-Penicillamine

Cat. No.: GC68045

Chemical Properties

Cas. No. 52-66-4

Formula $C_5H_{11}NO_2S$

M.Wt 149.21

Solubility H_2O : 33.33 mg/mL (223.38 mM; Need ultrasonic) Storage Store at $-20^{\circ}C$

General tips For obtaining a higher solubility , please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ 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

DL-Penicillamine [(±)-Penicillamine] is a copper chelating agent. DL-Penicillamine has antidotal effects in thallotoxicosis rats when co-treated with Prussian blue . DL-Penicillamine can cause pyridoxine deficiency and then induce optic axial neuritis. DL-Penicillamine can also depress primary immune response^{[1][2][3]}.

DL-Penicillamine (25 mg/kg; i.p.; twice daily, for 5 days) has antidotal effects in thallotoxicosis rats when co-treated with Prussian blue ^[2].

Animal Model: Male Wistar rats, NIH strain (intoxicated by i.p. injection of 32 mg/kg thallium (I) acetate)^[2]

Dosage: 25 mg/kg

Administration: i.p.; twice daily, for 5 days

Result: Decreased slightly the thallium content in blood, organs and brain. Increased the probability survival when co-treated with Prussian blue (50 mg/kg; p.o.).

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

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- [1]. TU J, BLACKWELL RQ, LEE PF. DL-penicillamine as a cause of optic axial neuritis. JAMA. 1963 Jul 13;185:83-6.
- [2]. Montes S, et al. Additive effect of DL-penicillamine plus Prussian blue for the antidotal treatment of thallotoxicosis in rats. Environ Toxicol Pharmacol. 2011 Nov;32(3):349-55.
- [3]. Huebner Kf, Gengozian N. Depression Of The Primary Immune Response By DL-Penicillamine. Proc Soc Exp Biol Med. 1965 Feb;118:561-5.

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