
Product Data Sheet

Product Name: 1,1,3-Tribromoacetone

Cat. No.: GC67833

Chemical Properties

Cas. No. 3475-39-6

Formula $C_3H_3Br_3O$

M.Wt 294.77

Solubility DMSO : 100 mg/mL (339.25 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

1,1,3-Tribromoacetone is an impurity of Methotrexate^[1]. Methotrexate, an **antimetabolite** and **antifolate** agent, inhibits the enzyme dihydrofolate reductase, thereby preventing the conversion of folic acid into tetrahydrofolate, and inhibiting DNA synthesis^[1].

Methotrexate (Amethopterin) reduces thymus and spleen indices of mice. Methotrexate markedly decreases white blood cells, thymic and splenic lymphocytes at dose ≥ 5 mg/kg. However, there is a significant difference between the treatment plus control group and the model group ($p < 0.01$). The combination of grape seed proanthocyanidins and Siberian ginseng eleutherosides obviously diminishes the effects of Methotrexate exposure on indices of thymus and spleens in mice^[2].

Methotrexate (MTX) (2 mg/kg; i.p.; once in a week for 5 weeks) is effective in Freund's complete adjuvant-induced arthritis. The combination of Methotrexate (1 mg/kg; i.p.; once in a week for 5 weeks) and Curcumin (30 mg/kg and 100 mg/kg, thrice a week for 5 weeks; i.p.) shows a significant anti-arthritic action and protection from hematological toxicity^[3].

[1]. Balwant Singh, et al. Process for the preparation of high purity methotrexate and

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

derivatives thereof. Patent US4374987A 87A

[2].

[2].Swierkot J, et al. Methotrexate in rheumatoid arthritis. Pharmacol Rep. 2006 Jul-Aug;58(4):473-92

[3]. Banji D, et al. Evaluation of the concomitant use of methotrexate and curcumin on Freund's complete adjuvant-induced arthritis and hematological indices in rats. Indian J Pharmacol. 2011;43(5):546-550.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA