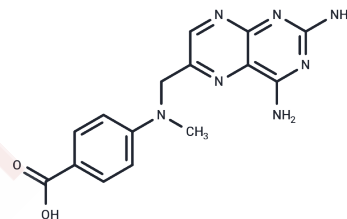


Methotrexate metabolite

Chemical Properties

CAS No. :	19741-14-1
Formula:	C ₁₅ H ₁₅ N ₇ O ₂
Molecular Weight:	325.33
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Methotrexate metabolite (DAMPA) (DAMPA) is the active metabolite of Methotrexate. Methotrexate is a folic acid antagonist. Methotrexate is used as a chemotherapeutic agent and immunosuppressant.
Targets(IC50)	Antifolate,Parasite,DHFR,Drug Metabolite
In vitro	Methotrexate metabolite was the most active, with 50% inhibitory concentrations in vitro of 446 ng/ml against the antifolate-sensitive strain and 812 ng/ml against the highly resistant strain under physiological folate conditions. Methotrexate metabolite potentiates the activity of the sulfone dapson, an inhibitor of dihydropteroate synthase, but not that of chlorcycloguanil, a known inhibitor of dihydrofolate reductase (DHFR)[2].

Solubility Information

Solubility	DMSO: 4 mg/mL (12.3 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (3.07 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0738 mL	15.369 mL	30.738 mL
5 mM	0.6148 mL	3.0738 mL	6.1476 mL
10 mM	0.3074 mL	1.5369 mL	3.0738 mL
50 mM	0.0615 mL	0.3074 mL	0.6148 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Schofield RC, et al. Development and validation of a turbulent flow chromatography and tandem mass spectrometry method for the quantitation of methotrexate and its metabolites 7-hydroxy methotrexate and DAMPA in serum. J Chromatogr B Analyt Technol Biomed Life Sci. 2015 Oct 1;1002:169-75.

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