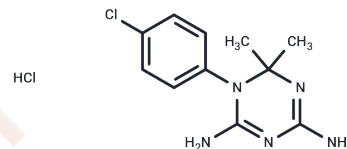


Cycloguanil hydrochloride

Chemical Properties

CAS No. :	152-53-4
Formula:	C ₁₁ H ₁₄ ClN ₅ .ClH
Molecular Weight:	288.18
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	Cycloguanil hydrochloride (Chloroguanide Triazine) is an active metabolite of the antimalarial compound proguanil. It acts as an inhibitor of dihydrofolate reductase (K _i : 0.3 and 1.5 nM for Plasmodium and human forms, respectively).
Targets(IC50)	Parasite, Drug Metabolite

Solubility Information

Solubility	DMSO: 20 mg/mL (69.4 mM), Sonication is recommended. H ₂ O: 5 mg/mL (17.35 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: 2 mg/mL (6.94 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	3.4701 mL	17.3503 mL	34.7005 mL
5 mM	0.694 mL	3.4701 mL	6.9401 mL
10 mM	0.347 mL	1.735 mL	3.4701 mL
50 mM	0.0694 mL	0.347 mL	0.694 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

Wright JD, et al. The role of S-mephenytoin hydroxylase (CYP2C19) in the metabolism of the antimalarial biguanides. *Br J Clin Pharmacol.* 1995 Apr;39(4):441-4.

Yuvaniyama J, et al. Insights into antifolate resistance from malarial DHFR-TS structures. *Nat Struct Biol.* 2003 May; 10(5):357-65.

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