Cycloguanil hydrochloride

Cat. No.: HY-12784A

CAS No.: 152-53-4

Molecular Formula: $C_{11}H_{15}Cl_2N_5$

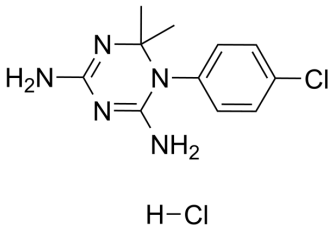
Molecular Weight: 288.18

Target: Parasite; Drug Metabolite

Pathway: Anti-infection; Metabolic Enzyme/Protease

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (216.88 mM; Need ultrasonic)

H_2O : 25 mg/mL (86.75 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Mass / Solvent / Concentration	1 mg	5 mg	10 mg
1 mM	3.4701 mL	17.3503 mL	34.7005 mL
5 mM	0.6940 mL	3.4701 mL	6.9401 mL
10 mM	0.3470 mL	1.7350 mL	3.4701 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (7.22 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (7.22 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (7.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cycloguanil hydrochloride, the active metabolite of Proguanil, acts on malaria schizonts in erythrocytes and hepatocytes[1].

REFERENCES

[1]. Matthaei J, et al. OCT1 Deficiency Affects Hepatocellular Concentrations and Pharmacokinetics of Cycloguanil, the Active Metabolite of the Antimalarial Drug Proguanil. Clin Pharmacol Ther. 2019 Jan;105(1):190-200.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA