Data Sheet (Cat.No.TMIH-0457)

TargetMol

Proguanil-D6 hydrochloride

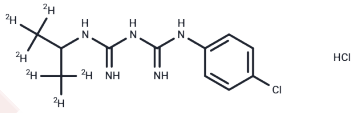
Chemical Properties

CAS No. :

Formula: C11H11D6Cl2N5

Molecular Weight: 296.23

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	Proguanil-D6 hydrochloride is a deuterated compound of Proguanil hydrochloride (T4382). Proguanil hydrochloride has a CAS number of 637-32-1. Proguanil Hydrochloride is a biguanide compound which metabolizes in the body to form cycloguanil, an anti-malaria agent.Upon hydrolysis, proguanil is converted to its active cyclic triazine metabolite, cycloguanil, by a cytochrome P450 dependent reaction. Cycloguanil selectively inhibits the bifunctional dihydrofolate reductase-thymidylate synthase of plasmodium parasite, thereby disrupting deoxythymidylate synthesis and ultimately blocking DNA and protein synthesis in the parasite.
Targets(IC50)	Antifolate,Parasite

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3758 mL	16.8788 mL	33.7576 mL
5 mM	0.6752 mL	3.3758 mL	6.7515 mL
10 mM	0.3376 mL	1.6879 mL	3.3758 mL
50 mM	0.0675 mL	0.3376 mL	0.6752 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

1. Gerlinde F. Plöger, etal. Biowaiver Monographs for Immediate Release Solid Oral Dosage Forms: Proguanil Hydrochloride[J]. Journal of Pharmaceutical Sciences, 2018, 163(4):1-21.

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