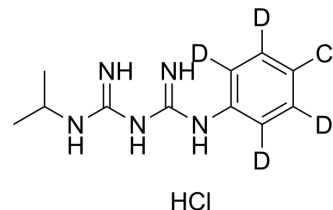


Proguanil-d4 hydrochloride

Cat. No.:	HY-B0806AS
CAS No.:	1189671-34-8
Molecular Formula:	C ₁₁ H ₁₃ D ₄ Cl ₂ N ₅
Molecular Weight:	294.22
Target:	Antifolate; Parasite; Isotope-Labeled Compounds
Pathway:	Cell Cycle/DNA Damage; Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Proguanil-d ₄ (hydrochloride) is the deuterium labeled Proguanil hydrochloride. Proguanil hydrochloride, an antimalarial proagent, is metabolized to the active metabolite Cycloguanil (HY-12784). Proguanil hydrochloride is a dihydrofolate reductase (DHFR) inhibitor[1][2].
IC₅₀ & Target	Plasmodium
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [4]. Lochner M, et al. The antimalarial drug proguanil is an antagonist at 5-HT₃ receptors. *J Pharmacol Exp Ther.* 2014 Dec;351(3):674-84.
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Caution: Product has not been fully validated for medical applications. For research use only.

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