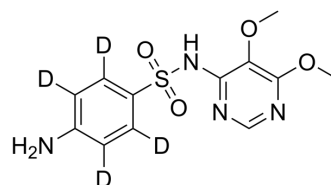


Sulfadoxine-d4

Cat. No.:	HY-B0439S		
CAS No.:	1330266-05-1		
Molecular Formula:	C ₁₂ H ₁₀ D ₄ N ₄ O ₄ S		
Molecular Weight:	314.35		
Target:	HIV; Parasite; Endogenous Metabolite; Antibiotic		
Pathway:	Anti-infection; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Sulfadoxine-d ₄ is the deuterium labeled Sulfadoxine. Sulfadoxine(Sulphadoxine) is a long acting sulfonamide that is used, usually in combination with other agents, for respiratory, urinary tract and malarial infections. Sulfadoxine inhibits HIV replication in peripheral blood mononuclear cells.
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

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.
- [2]. D'Alessandro S, et al. The Use of Antimalarial Drugs against Viral Infection. *Microorganisms*. 2020 Jan 8;8(1). pii: E85.
- [3]. http://www.malaria-ipca.com/sulphadoxine_pyrimethamine.html
- [4]. <http://en.wikipedia.org/wiki/Sulfadoxine/pyrimethamine>

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

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