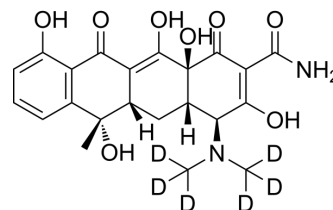


Tetracycline-d₆

Cat. No.:	HY-A0107S	
CAS No.:	2373374-42-4	
Molecular Formula:	C ₂₂ H ₁₈ D ₆ N ₂ O ₈	
Molecular Weight:	450.47	
Target:	Bacterial; Antibiotic	
Pathway:	Anti-infection	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



BIOLOGICAL ACTIVITY

Description	Tetracycline-d ₆ is the deuterium labeled Tetracycline. Tetracycline is a broad-spectrum antibiotic, exhibiting activity against a wide range of gram-positive and gram-negative bacteria.
IC₅₀ & Target	Tetracycline
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]. Chopra I, et al. Tetracycline antibiotics: mode of action, applications, molecular biology, and epidemiology of bacterial resistance. *Microbiol Mol Biol Rev*. 2001 Jun;65(2):232-60.

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

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