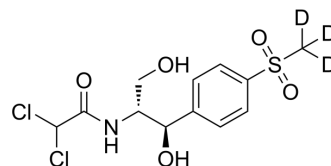


Thiamphenicol-d₃

Cat. No.:	HY-B0479S
CAS No.:	2211914-19-9
Molecular Formula:	C ₁₂ H ₁₂ D ₃ Cl ₂ NO ₃ S
Molecular Weight:	359.24
Target:	Bacterial; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Thiamphenicol-d ₃ is a deuterium labeled Thiamphenicol. Thiamphenicol, a methyl-sulfonyl derivative of Chloramphenicol, is a broad-spectrum antimicrobial antibiotic. Thiamphenicol acts by binding to the 50S ribosomal subunit, leading to inhibition of protein synthesis and bacteriostatic effect (against Gram-negative, Gram-positive aerobic and anaerobic bacteria)[1][2].
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]. A Marchese, et al. In vitro activity of thiamphenicol against multiresistant Streptococcus pneumoniae, Haemophilus influenzae and Staphylococcus aureus in Italy. J Chemother. 2002 Dec;14(6):554-61.
- [2]. Marta Tikhomirov, et al. Pharmacokinetics of florfenicol and thiamphenicol in ducks. J Vet Pharmacol Ther. 2019 Jan;42(1):116-120.

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