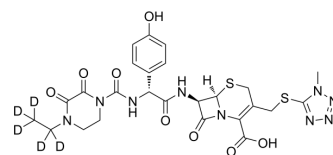


Cefoperazone-d₅

Cat. No.:	HY-B0210S
CAS No.:	2410425-70-4
Molecular Formula:	C ₂₅ H ₂₂ D ₅ N ₉ O ₈ S ₂
Molecular Weight:	650.7
Target:	Bacterial; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	<div> <div>Powder</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> </div> <div> <div>In solvent</div> <div>-80°C 6 months</div> <div>-20°C 1 month</div> </div>



BIOLOGICAL ACTIVITY

Description	Cefoperazone-d ₅ is deuterium labeled Cefoperazone. Cefoperazone, a semisynthetic cephalosporin, has a broad spectrum of antibacterial activity[1].	
IC ₅₀ & Target	β-lactam	β-lactam
In Vitro	<p>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].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>	

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
- [2]. N Matsubara, et al. In vitro antibacterial activity of cefoperazone (T-1551), a new semisynthetic cephalosporin. Antimicrob Agents Chemother. 1979 Dec;16(6):731-5.
- [3]. Pedro H.Di Rocco, et al. Aerosol treatment with cefoperazone or gentamicin protects granulocytopenic mice from acute Pseudomonas aeruginosa pneumonia. European Journal of Pharmaceutical Sciences Volume 1, Issue 6, June 1994, Pages 285-289.

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