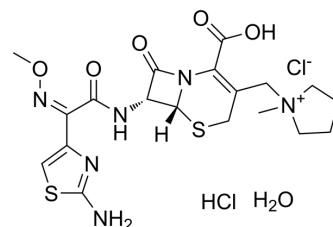


Cefepime Dihydrochloride Monohydrate

Cat. No.:	HY-B0616
CAS No.:	123171-59-5
Molecular Formula:	C ₁₉ H ₂₈ Cl ₂ N ₆ O ₆ S ₂
Molecular Weight:	571.5
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 10 mg/mL (17.50 mM; Need ultrasonic) DMSO : 6 mg/mL (10.50 mM; Need ultrasonic)				
	Preparing Stock Solutions	<div>Solvent Concentration</div> <div>Mass</div>	1 mg	5 mg	10 mg
		1 mM	1.7498 mL	8.7489 mL	17.4978 mL
		5 mM	0.3500 mL	1.7498 mL	3.4996 mL
		10 mM	0.1750 mL	0.8749 mL	1.7498 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 7.14 mg/mL (12.49 mM); Clear solution; Need ultrasonic				
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (3.64 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.08 mg/mL (3.64 mM); Suspended solution; Need ultrasonic				
	4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.64 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Cefepime Dihydrochloride Monohydrate is a broad-spectrum cephalosporin with enhanced coverage against Gram-positive and Gram-negative bacteria ^[1] .
IC ₅₀ & Target	β-lactam

In Vitro	<p>Cefepime is an extended-spectrum parenteral cephalosporin antibiotic active in vitro against a broad spectrum of gram-positive and gram-negative aerobic bacteria. Cefepime has a decreased propensity to induce beta-lactamases compared with other beta-lactam antibiotics^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
In Vivo	<p>Cefepime has a pharmacokinetic disposition similar to that of other renally eliminated cephalosporins, with a half-life of approximately 2 hours. Cefepime has demonstrated clinical efficacy against a variety of infections, including urinary tract infections, pneumonia, and skin and skin structure infections. Cefepime is generally well tolerated^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

CUSTOMER VALIDATION

- J Antibiot (Tokyo). 2023 Feb 1.
- Animal Diseases. 02 November 2021.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Neu, H.C., Safety of cefepime: a new extended-spectrum parenteral cephalosporin. Am J Med, 1996. 100(6A): p. 68S-75S.
- [2]. Wynd, M.A. and J.A. Paladino, Cefepime: a fourth-generation parenteral cephalosporin. Ann Pharmacother, 1996. 30(12): p. 1414-24.

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