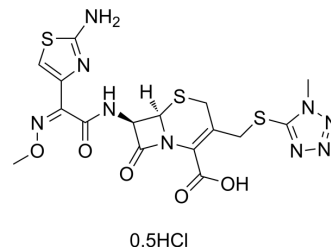


Cefmenoxime hydrochloride

Cat. No.:	HY-B0875
CAS No.:	75738-58-8
Molecular Formula:	C ₁₆ H _{17.5} Cl _{0.5} N ₉ O ₅ S ₃
Molecular Weight:	529.79
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 65 mg/mL (122.69 mM; Need ultrasonic and warming)
H₂O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		Concentration	1 mg	5 mg	10 mg
	1 mM		1.8875 mL	9.4377 mL	18.8754 mL
	5 mM		0.3775 mL	1.8875 mL	3.7751 mL
	10 mM		0.1888 mL	0.9438 mL	1.8875 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Cefmenoxime (SCE-1365) hydrochloride is a new semisynthetic cephalosporin antibiotic. Cefmenoxime has antibacterial activity against a wide variety of gram-positive and gram-negative bacteria^{[1][2]}.

IC₅₀ & Target

β-lactam

In Vitro

Cefmenoxime (SCE-1365) hydrochloride inhibits at least 90% of strains tested (MIC₉₀) ranged from 0.06 to 8 μg/mL for the Enterobacteriaceae^[1].
Cefmenoxime (SCE-1365) hydrochloride inhibits MIC₉₀ values for gram-positive cocci are 0.015 and ≤0.008 μg/mL for *Streptococcus pneumoniae* and *Streptococcus pyogenes*, respectively, and 2 μg/mL for *S. aureus*^[1].
Cefmenoxime (SCE-1365) hydrochloride against *Haemophilus influenzae*, *Neisseria gonorrhoeae*, and *Neisseria meningitidis* with MIC₉₀ values ranging from ≤0.008 to 0.25 μg/mL^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Cefmenoxime (SCE-1365) hydrochloride (40 mg/kg; i.h.; daily, for 7 d; male Jcl:ICR mice) improves the survival rate of mice infected with lung bacteria^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Jcl:ICR mice ^[2]
Dosage:	40 mg/kg
Administration:	Subcutaneous injection; daily, for 7 days
Result:	Inhibited mortality rate of animals was 60% at a dose of 40 mg/kg.

REFERENCES

[1]. Stamm JM, et, al. Antimicrobial activity of cefmenoxime (SCE-1365). Antimicrob Agents Chemother. 1981 Mar;19(3):454-60.

[2]. Tataro O, et, al. Synergistic effects of romurtide and cefmenoxime against experimental Klebsiella pneumonia in mice. Antimicrob Agents Chemother. 1992 Jan;36(1):167-71.

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

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