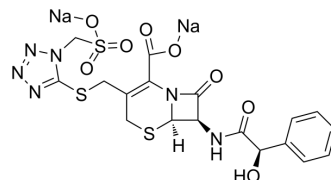


Cefonicid sodium

Cat. No.:	HY-B1300
CAS No.:	61270-78-8
Molecular Formula:	C ₁₈ H ₁₆ N ₆ Na ₂ O ₈ S ₃
Molecular Weight:	586.53
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

DMSO : 125 mg/mL (213.12 mM; Need ultrasonic)
H₂O : 100 mg/mL (170.49 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.7049 mL	8.5247 mL	17.0494 mL
5 mM	0.3410 mL	1.7049 mL	3.4099 mL
10 mM	0.1705 mL	0.8525 mL	1.7049 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (170.49 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cefonicid sodium is a broadspectrum cephalosporin antibiotic which inhibits the formation of the bacterial cell wall. Target: Antibacterial Cefonicid sodium can inhibit the carnitine/carnitine antiport when it is added internally and externally to proteoliposomes. It is known that the molecule contains various electroactive groups that can be detected using adsorptive square-wave stripping voltammetry. In addition, the compound can be detected in solution using UV spectroscopy at 265 nm. Cefonicid sodium is effective against Escherichia coli, Klebsiella, Citrobacter, Enterobacter, indole-negative Proteus,

and Providencia.

IC₅₀ & Target

β-lactam

REFERENCES

- [1]. Saltiel E, et al. Cefonicid. A review of its antibacterial activity, pharmacological properties and therapeutic use. *Drugs*. 1986 Sep;32(3):222-59.
- [2]. Dudley MN, et al. Review of cefonicid, a long-acting cephalosporin. *Clin Pharm*. 1984 Jan-Feb;3(1):23-32.
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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