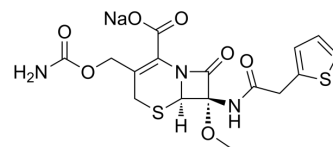


Cefoxitin sodium

Cat. No.:	HY-B1117
CAS No.:	33564-30-6
Molecular Formula:	C ₁₆ H ₁₆ N ₃ NaO ₇ S ₂
Molecular Weight:	449.43
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 : ≥ 100 mg/mL (222.50 mM)
 H₂O : ≥ 100 mg/mL (222.50 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.2250 mL	11.1252 mL	22.2504 mL
	5 mM	0.4450 mL	2.2250 mL	4.4501 mL
	10 mM	0.2225 mL	1.1125 mL	2.2250 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 50 mg/mL (111.25 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 (5.56 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.56 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cefoxitin sodium (MK-306) is a cephamycin antibiotic, often grouped with the second generation cephalosporins, acts by interfering with cell wall synthesis, its activity spectrum includes a broad range of gram-negative and gram-positive bacteria.

IC₅₀ & Target

β-lactam

CUSTOMER VALIDATION

- Nat Microbiol. 2023 Mar;8(3):410-423.
- Nat Commun. 2023 Mar 22;14(1):1594.
- Nat Commun. 2022 Mar 2;13(1):1116.
- J Antimicrob Chemother. 2020 Jul 1;75(7):1850-1858.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Cavalli Z, et al. Prolonged Cefoxitin Infusion Using Mobile Elastomeric Infusors In Outpatients With Bone And Joint Infection. J Bone Jt Infect. 2018 Sep 7;3(4):182-186.

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

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