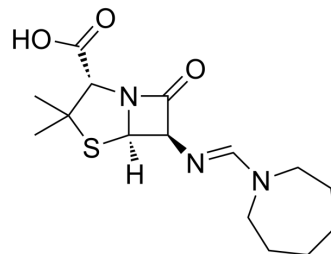


Mecillinam

Cat. No.:	HY-A0269
CAS No.:	32887-01-7
Molecular Formula:	C ₁₅ H ₂₃ N ₃ O ₃ S
Molecular Weight:	325.43
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (768.21 mM; Need ultrasonic)
H₂O : 100 mg/mL (307.29 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.0729 mL	15.3643 mL	30.7286 mL
	5 mM	0.6146 mL	3.0729 mL	6.1457 mL
	10 mM	0.3073 mL	1.5364 mL	3.0729 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 (307.29 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 6.25 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 6.25 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 6.25 mg/mL (19.21 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Mecillinam (Amdinocillin), the β-lactam antibiotic, has a broad spectrum of activity against gram-negative organisms^[1].

IC₅₀ & Target

β-lactam

In Vivo

Mecillinam (Amdinocillin, 400 mg per kg) is effective for the treatment of catheter-associated infections at high dosages (400

mg per kg of body weight/d)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Mecillinam (Amdinocillin, 400 mg per kg) is effective for the treatment of catheter-associated infections at high dosages (400 mg per kg of body weight/d) ^[1] .
Dosage:	50, 100, 200, and 400 mg per kg.
Administration:	Intravenously each day in four divided doses over a 72-h period.
Result:	High dose of 400 mg/kg exhibited significant activity.

CUSTOMER VALIDATION

- Microbiol Spectr. 2023 Apr 24;e0069223.
- Microbiol Spectr. 2022 Dec 8;e0303822.

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REFERENCES

[1]. M E Olson, et al. Amdinocillin Treatment of Catheter-Associated Bacteriuria in Rabbits. J Infect Dis. 1989 Jun;159(6):1065-72.

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

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