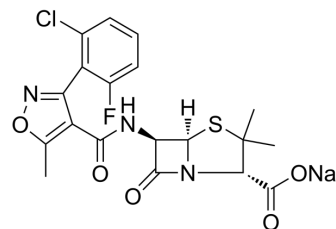


Flucloxacillin sodium

Cat. No.:	HY-A0246A
CAS No.:	1847-24-1
Molecular Formula:	C ₁₉ H ₁₆ ClFN ₃ NaO ₅ S
Molecular Weight:	475.85
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

H₂O : 100 mg/mL (210.15 mM; Need ultrasonic)
 DMSO : ≥ 100 mg/mL (210.15 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.1015 mL	10.5075 mL	21.0150 mL
	5 mM	0.4203 mL	2.1015 mL	4.2030 mL
	10 mM	0.2102 mL	1.0508 mL	2.1015 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 (210.15 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 (5.25 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.25 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (5.25 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Flucloxacillin sodium is an active antibiotic against gram-positive and gram-negative bacteria^{[1][2]}.

IC₅₀ & Target

Bacterial^[1]

In Vivo

Flucloxacillin sodium (200 mg/kg; i.p.; three times/day, for 21 days; male Wistar rats) has effective against the most common

bacterial strains in periprosthetic infection^[1].

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

Animal Model:	Male Wistar rats ^[1]
Dosage:	200 mg/kg
Administration:	Intraperitoneal injection; three times/day, for 21 days
Result:	Reduced germs in the biofilm and in the bone tissue.

REFERENCES

[1]. Greimel F, et, al. Efficacy of antibiotic treatment of implant-associated *Staphylococcus aureus* infections with moxifloxacin, flucloxacillin, rifampin, and combination therapy: an animal study. *Drug Des Devel Ther.* 2017 Jun 14;11:1729-1736.

[2]. Comber KR, Merrikin DJ, Sutherland R. Antibacterial activity and synergy, in vitro and in vivo, of a combination of amoxicillin and flucloxacillin. *Chemotherapy.* 1979;25(1):30-9.

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

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