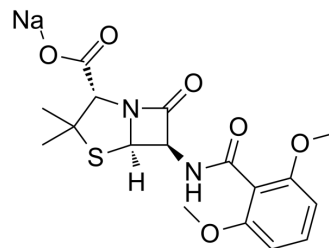


## Methicillin sodium salt

<b>Cat. No.:</b>	HY-B0974
<b>CAS No.:</b>	132-92-3
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>19</sub> N <sub>2</sub> NaO <sub>6</sub> S
<b>Molecular Weight:</b>	402.4
<b>Target:</b>	Bacterial; Antibiotic
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	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 : 125 mg/mL (310.64 mM; Need ultrasonic)  
H<sub>2</sub>O : 100 mg/mL (248.51 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4851 mL	12.4254 mL	24.8509 mL
	5 mM	0.4970 mL	2.4851 mL	4.9702 mL
	10 mM	0.2485 mL	1.2425 mL	2.4851 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (5.17 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (5.17 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (5.17 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Methicillin sodium salt (Meticillin sodium) is a β-lactam antibiotic which acts by inhibiting penicillin-binding proteins that are involved in the synthesis of peptidoglycan.

### CUSTOMER VALIDATION

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- Sci Rep. 2021 Apr 22;11(1):8690.
  - Biomed Res Int. 2018 Jul 2;2018:3579832.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. Yang X, et al. Exosome-encapsulated antibiotic against intracellular infections of methicillin-resistant *Staphylococcus aureus*. *Int J Nanomedicine*. 2018 Nov 29;13:8095-8104.

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

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