# **Product** Data Sheet

## Carbenicillin

Cat. No.: HY-B0525 CAS No.: 4697-36-3 Molecular Formula:  $C_{17}H_{18}N_2O_6S$ 

Molecular Weight: 378.4

Target: Bacterial; Antibiotic

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

#### **BIOLOGICAL ACTIVITY**

Description	Carbenicillin is a broad-spectrum semi-synthetic penicillin antibiotic for gram-negative bacteria. Carbenicillin can interfere the cell wall synthesis while displaying low toxicity to plant tissue $^{[1][2]}$ .
IC <sub>50</sub> & Target	β-lactam
In Vivo	Carbenicillin (100-400 mg/kg; intramuscular injection every 8 h for 72 h) significantly reduces mortality of neutropenic Pseudomonas-infected rats <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **CUSTOMER VALIDATION**

- Antimicrob Agents Chemother. 2023 May 18;e0160322.
- Microbiol Spectr. 2023 Apr 24;e0069223.
- Microbiol Spectr. 2022 Dec 8;e0303822.
- ChemRxiv. 2020 Apr.

See more customer validations on www.MedChemExpress.com

#### **REFERENCES**

[1]. Scott RE, et, al. Synergistic activity of carbenicillin and gentamicin in experimental Pseudomonas bacteremia in neutropenic rats. Antimicrob Agents Chemother. 1976 Oct;10(4):646-51.

[2]. Neu HC, et, al. Carbenicillin and ticarcillin. Med Clin North Am. 1982 Jan;66(1):61-77.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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

Page 2 of 2 www.MedChemExpress.com