

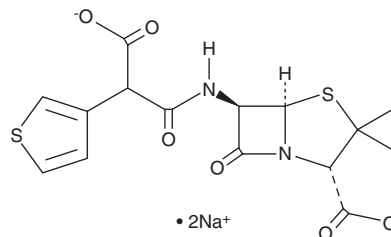
PRODUCT INFORMATION



Ticarcillin (sodium salt)

Item No. 26065

CAS Registry No.: 4697-14-7
Formal Name: (2S,5R,6R)-6-[[2-carboxy-2-(3-thienyl)acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, disodium salt
MF: C₁₅H₁₄N₂O₆S₂ • 2Na
FW: 428.4
Purity: ≥95% (mixture of diastereomers)
UV/Vis.: λ_{max}: 302 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ticarcillin (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the ticarcillin (sodium salt) in the solvent of choice, which should be purged with an inert gas. Ticarcillin (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ticarcillin (sodium salt) in these solvents is approximately 2, 16, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ticarcillin (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ticarcillin (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ticarcillin is a semisynthetic β-lactam antibiotic.^{1,2} It is active against *P. aeruginosa*, *E. coli*, *P. mirabilis*, *P. rettgeri*, and *K. aerogenes* (MICs = 4-125 μg/ml).² Topical administration of ticarcillin (2.5 mg per eye) reduces *P. aeruginosa* colony count in rabbit eye.¹ Formulations containing ticarcillin have been used in the treatment of a variety of bacterial infections.

References

1. Ahmad, A., Smolin, G., Okumoto, M., et al. Ticarcillin in the treatment of experimental pseudomonas keratitis. *Br. J. Ophthalmol.* **61**(2), 92-95 (1977).
2. Comber, K.R., Basker, M.J., Osborne, C.D., et al. Synergy between ticarcillin and tobramycin against *Pseudomonas aeruginosa* and *Enterobacteriaceae* in vitro and in vivo. *Antimicrob. Agents Chemother.* **11**(6), 956-964 (1977).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/11/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM