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Produktinformation



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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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PRODUCT INFORMATION



Ceftazidime (hydrate)

Item No. 14828

CAS Registry No.: 78439-06-2
Formal Name: 1-[[[(6R,7R)-7-[[[(2Z)-(2-amino-4-thiazolyl)](1-carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-pyridinium, pentahydrate

MF: C₂₂H₂₂N₆O₇S₂ • 5H₂O

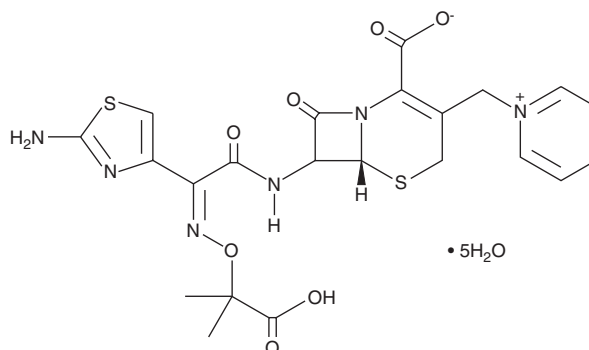
FW: 636.7

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

Ceftazidime (hydrate) is supplied as a crystalline solid. Aqueous solutions of ceftazidime (hydrate) can be prepared by directly dissolving the ceftazidime (hydrate) in aqueous buffers. The solubility of ceftazidime (hydrate) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ceftazidime is a cephalosporin antibiotic.¹ It is active against isolates of numerous Gram-positive and Gram-negative bacteria, including *E. coli*, *K. pneumoniae*, *P. mirabilis*, and *S. pyogenes* (MICs = 0.015-8 µg/ml for all). It binds to *E. coli* penicillin-binding protein 1a (PBP1a), -1b, -2, and -3 (IC₅₀s = 0.9, 3.4, 240, and 0.06 µg/ml, respectively).² Ceftazidime increases survival in mice infected with strains of *S. aureus*, *E. coli*, *K. pneumoniae*, *Proteus*, or *Serratia* (ED₅₀s = 0.1-25 mg/kg for all).¹ Formulations containing ceftazidime have been used in the treatment of bacterial infections.

References

1. Acred, P., Ryan, D.M., Sowa, M.A., *et al.* The in-vivo antibacterial activity of ceftazidime (Gr 20263)--a comparison with other new β-lactam antibiotics and gentamicin. *J. Antimicrob. Chemother.* **8(Suppl. B)**, 247-255 (1981).
2. Fontana, R., Cornaglia, G., Ligozzi, M., *et al.* The final goal: Penicillin-binding proteins and the target of cephalosporins. *Clin. Microbiol. Infect.* **6(Suppl. 3)**, 34-40 (2000).

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

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