

PRODUCT INFORMATION

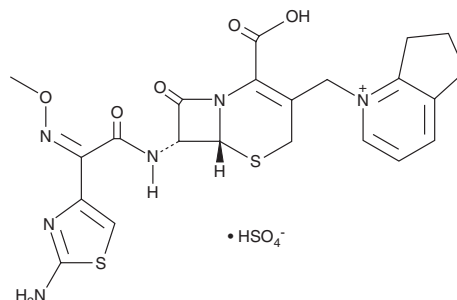


Cefpirome (sulfate)

Item No. 37398

CAS Registry No.: 98753-19-6
Formal Name: 1-[[[(6R,7R)-7-[[[(2Z)-(2-amino-4-thiazolyl)(methoxyimino)acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-6,7-dihydro-5H-cyclopenta[b]pyridinium, monosulfate

Synonym: HR 810
MF: C₂₂H₂₃N₆O₅S₂ • HSO₄⁻
FW: 612.7
Purity: ≥98%
UV/Vis.: λ_{max}: 272 nm
Supplied as: A 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

Cefpirome (sulfate) is supplied as a solid. A stock solution may be made by dissolving the cefpirome (sulfate) in the solvent of choice, which should be purged with an inert gas. Cefpirome (sulfate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of cefpirome (sulfate) in these solvents is approximately 10 and 1 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 cefpirome (sulfate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of cefpirome (sulfate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Cefpirome is a cephalosporin antibiotic.¹ It is active against clinical isolates of various bacteria, including *K. pneumoniae*, *E. aerogenes*, *Salmonella*, and *Shigella* (MIC_{50S} = 0.06, 0.12, 0.06, and 0.06 µg/ml, respectively). Cefpirome protects non-leukopenic mice from systemic bacterial infections induced by *E. coli*, *S. aureus*, or *S. marcescens* (ED_{50S} = 0.76, 1.1, and 7.5 mg/kg, respectively).²

References

1. Chin, N.-X., Gu, J.-W., Fang, W., *et al.* In vitro activity of cefquinome, a new cephalosporin, compared with other cephalosporin antibiotics. *Diagn. Microbiol. Infect. Dis.* **15**(4), 331-337 (1992).
2. Arai, S., Kobayashi, S., and Hayashi, S. Therapeutic effects of cefpirome, a new cephalosporin, on various models of infections in mice and rats. *Jpn. J. Antibiot.* **43**(1), (1990).

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.

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