

PRODUCT INFORMATION

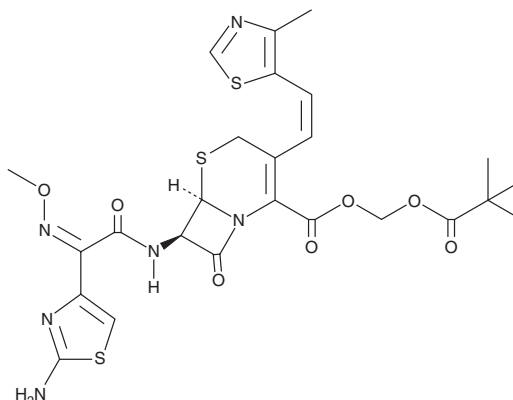


Cefditoren Pivoxil

Item No. 30315

CAS Registry No.: 117467-28-4
Formal Name: (6R,7R)-7-[[[(2Z)-2-(2-amino-4-thiazolyl)-2-(methoxyimino)acetyl]amino]-3-[(1Z)-2-(4-methyl-5-thiazolyl)ethenyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, (2,2-dimethyl-1-oxopropoxy)methyl ester

Synonym: ME1207
MF: C₂₅H₂₈N₆O₇S₃
FW: 620.7
Purity: ≥95%
UV/Vis.: λ_{max}: 230 nm
Supplied as: A 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

Cefditoren pivoxil is supplied as a solid. A stock solution may be made by dissolving the cefditoren pivoxil in the solvent of choice, which should be purged with an inert gas. Cefditoren pivoxil is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of cefditoren pivoxil in these solvents is approximately 10 and 15 mg/ml, respectively.

Cefditoren pivoxil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cefditoren pivoxil should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cefditoren pivoxil has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cefditoren pivoxil is an orally bioavailable prodrug form of the broad-spectrum cephalosporin antibiotic cefditoren.¹ Cefditoren pivoxil is hydrolyzed by intestinal wall esterases to form cefditoren. Cefditoren pivoxil is effective against systemic *S. aureus*, *E. coli*, *K. pneumoniae*, *P. mirabilis*, or *S. marcescens* infections in mice with ED₅₀ values of 10, 2.5, 11, 4.4, and 11 mg/kg, respectively.² Formulations containing cefditoren pivoxil were previously used in the treatment of acute bacterial exacerbations of chronic bronchitis and community-acquired pneumonia.

References

1. Balbisi, E.A. Cefditoren, a new aminothiazolyl cephalosporin. *Pharmacotherapy* **22(10)**, 1278-1293 (2002).
2. Tamura, A., Okamoto, R., Yoshida, T., *et al.* In vitro and in vivo antibacterial activities of ME1207, a new oral cephalosporin. *Antimicrob. Agents Chemother.* **32(9)**, 1421-1426 (1988).

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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