

PRODUCT INFORMATION

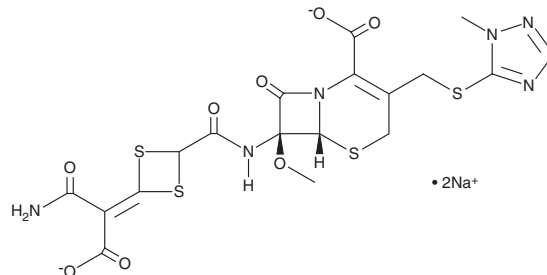


Cefotetan (sodium salt)

Item No. 23624

CAS Registry No.: 74356-00-6
Formal Name: (6R,7S)- 7-[[[4-(2-amino-1-carboxy-2-oxoethylidene)-1,3-dithietan-2-yl]carbonyl]amino]-7-methoxy-3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, disodium salt

Synonym: YM-09330
MF: C₁₇H₁₅N₇O₈S₄ • 2Na
FW: 619.6
Purity: ≥95%
UV/Vis.: λ_{max}: 290 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

Cefotetan (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the cefotetan (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cefotetan (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of cefotetan (sodium salt) in these solvents is approximately 10 and 3 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 cefotetan (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of cefotetan (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

Cefotetan is a cephamycin antibiotic that is active against both Gram-positive and Gram-negative bacteria including isolates of *E. coli*, *S. aureus*, *K. pneumoniae*, and *P. maltophilia* (MICs = 0.03-32 mg/ml).¹ It reduces mortality by 50% in a rabbit model of fecal peritonitis when administered at a dose of 25 mg/kg twice daily.² Formulations containing cefotetan have been used in the treatment of various bacterial infections.

References

1. Daschner, F.D., Goerke, C., Bassler, M., *et al.* In vitro comparison of cefotetan with five other cephalosporins against nosocomial pathogens. *Chemotherapy* **28(5)**, 351-354 (1982).
2. Ablan, C.J., Olen, R.N., Dobrin, P.B., *et al.* Efficacy of intraperitoneal antibiotics in the treatment of severe fecal peritonitis. *Am. J. Surg.* **162(5)**, 453-456 (1991).

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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