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Cephalothin Sodium

National Cancer Institute

Source

National Cancer Institute. *Cephalothin Sodium*. NCI Thesaurus. Code C358.

The sodium salt form of cephalothin, a semisynthetic, beta-lactam, first-generation cephalosporin antibiotic with bactericidal activity. Cephalothin binds to and inactivates penicillin-binding proteins (PBP) located on the inner membrane of the bacterial cell wall. PBPs participate in the terminal stages of assembling the bacterial cell wall, and in reshaping the cell wall during cell division. Inactivation of PBPs interferes with the cross-linkage of peptidoglycan chains necessary for bacterial cell wall strength and rigidity. This results in the weakening of the bacterial cell wall and causes cell lysis.