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# Cephalexin Hydrochloride

National Cancer Institute

## Source

National Cancer Institute. *Cephalexin Hydrochloride*. NCI Thesaurus. Code C47969.

The hydrochloride salt form of cephalexin, a beta-lactam, first-generation cephalosporin antibiotic with bactericidal activity. Cephalexin hydrochloride 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.