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Carbenicillin

National Cancer Institute

Source

National Cancer Institute. *Carbenicillin*. NCI Thesaurus. Code C343.

A broad-spectrum, semi-synthetic penicillin antibiotic with bactericidal and beta-lactamase resistant activity. Carbenicillin acylates the penicillin-sensitive transpeptidase C-terminal domain by opening the lactam ring. This inactivation prevents the cross-linkage of peptidoglycan strands, thereby inhibiting the third and last stage of bacterial cell wall synthesis. This leads to incomplete bacterial cell wall synthesis and eventually causes cell lysis.