## Open Peer Review on Qeios

## Carbenicillin Disodium

National Cancer Institute

## Source

National Cancer Institute. <u>Carbenicillin Disodium</u>. NCI Thesaurus. Code C65285.

The disodium salt form of carbenicillin, 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.