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# Imipenem-Cilastatin Sodium

National Cancer Institute

## Source

National Cancer Institute. *Imipenem-Cilastatin Sodium*. NCI Thesaurus. Code C2338.

A parenteral antibiotic preparation containing imipenem and cilastatin sodium with bactericidal activity. Imipenem, a broad spectrum beta-lactam antibiotic, binds to penicillin-binding proteins (PBP) on the inner membrane of the bacterial cell wall, thereby interfering with the cross-linkage of peptidoglycan chains critical for bacterial cell wall strength and rigidity. Cilastatin sodium is added to reduce breakdown of imipenem by kidney dehydropeptidase. This agent is effective against both gram positive and negative bacteria and is often used in treating severe infections caused by multiresistant organisms.