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Ertapenem Sodium

National Cancer Institute

Source

National Cancer Institute. *Ertapenem Sodium*. NCI Thesaurus. Code C61753.

The sodium salt of ertapenem, a 1-beta-methyl carbapenem and a broad-spectrum beta-lactam antibiotic with bactericidal activity. Ertapenem binds to penicillin binding proteins (PBPs) located on the bacterial cell wall, in particular PBPs 2 and 3, thereby inhibiting the final transpeptidation step in the synthesis of peptidoglycan, an essential component of the bacterial cell wall. Inhibition of peptidoglycan synthesis results in weakening and lysis of the cell wall and cell death. In vitro, this agent has shown activity against Gram-positive and Gram-negative aerobic and anaerobic bacteria. Ertapenem is resistant to hydrolysis by a variety of beta-lactamases, including penicillinases, cephalosporinases and extended-spectrum beta-lactamases.