

[Open Peer Review on Qeios](#)

Ertapenem

National Cancer Institute

Source

National Cancer Institute. *Ertapenem*. NCI Thesaurus. Code C61752.

A 1-beta-methyl carbapenem and broad-spectrum beta-lactam antibiotic with bactericidal property. 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 results in a weakening and subsequent lysis of the cell wall leading to cell death of Gram-positive and Gram-negative aerobic and anaerobic pathogens. This agent is stable against hydrolysis by a variety of beta-lactamases, including penicillinases, cephalosporinases and extended-spectrum beta-lactamases.