

[Open Peer Review on Qeios](#)

# Bacitracin

National Cancer Institute

## Source

National Cancer Institute. *Bacitracin*. NCI Thesaurus. Code C295.

A complex of cyclic polypeptide antibiotics, mainly bacitracin A, produced by spore-forming organisms belonging to the licheniformin group of the *Bacillus subtilis* with antibacterial activity. Bacitracin binds to C55-isoprenyl pyrophosphate, a biphosphate lipid transport molecule that carries the building blocks of the peptidoglycan bacterial cell wall. The binding interferes with the enzymatic dephosphorylation of the C55-isoprenyl pyrophosphate and prevents peptidoglycan synthesis, thereby inhibiting bacterial cell growth.