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# Chloramphenicol

National Cancer Institute

## Source

National Cancer Institute. *Chloramphenicol*. NCI Thesaurus. Code C363.

A semisynthetic, broad-spectrum antibiotic derived from *Streptomyces venekuelae* with primarily bacteriostatic activity. Chloramphenicol diffuses through the bacterial cell wall and reversibly binds to the bacterial 50S ribosomal subunit. The binding interferes with peptidyl transferase activity, thereby prevents transfer of amino acids to the growing peptide chains and blocks peptide bond formation. As a result bacterial protein synthesis is blocked and impede bacterial cell proliferation.