Dihydrostreptomycin

National Cancer Institute

Source

A derivative of streptomycin, aminoglycoside antibiotic, with bactericidal property. Dihydrostreptomycin depends on active transport across the bacterial cell membrane before irreversibly binding S12 protein of the bacterial 30S ribosomal subunit. As a result, this agent interferes with the initiation complex between messenger RNA and the bacterial ribosome thereby causing the misreading of the genetic code resulting in the production of non-functional proteins, consequently leading to bacterial cell death.