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Demeclocycline

National Cancer Institute

Source

National Cancer Institute. *Demeclocycline*. NCI Thesaurus. Code C47980.

A semi-synthetic, broad-spectrum naphthacene antibiotic produced by the bacterium *Streptomyces aureofaciens*. Demeclocycline binds to bacterial 30S ribosomal subunit and prevents binding of aminoacyl-tRNA to the mRNA-ribosome complex, thereby inhibiting protein synthesis. Demeclocycline also inhibits the effect of vasopressin on the renal tubules, thereby causing diuresis.