Open Peer Review on Qeios

Trimethoprim Sulfate

National Cancer Institute

Source

National Cancer Institute. <u>Trimethoprim Sulfate</u>. NCI Thesaurus. Code C48028.

The sulfate salt form of trimethoprim, a synthetic substituted pyrimidine with antibacterial activity. Trimethoprim sulfate selectively binds to and reversibly inhibits dihydrofolate reductase, thereby blocking the production of tetrahydrofolic acid from dihydrofolic acid. This leads to an inhibition of bacterial synthesis of folic acid, thereby affecting nucleic acid and protein synthesis. Trimethoprim sulfate has a stronger binding affinity for the bacterial enzyme than for the corresponding mammalian enzyme.