Thymidylate Synthase Inhibitor DFP-11207

National Cancer Institute

Source

An orally available thymidylate synthase (TS) inhibitor with potential antineoplastic activity. Upon oral administration, DFP-11207 binds to and inhibits TS. This reduces thymine nucleotide synthesis, inhibits DNA synthesis and cell division, causes DNA damage and leads to tumor cell apoptosis. TS catalyzes the conversion of deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP).