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Nucleoside Analog DFP-10917

National Cancer Institute

Source

National Cancer Institute. *Nucleoside Analog DFP-10917*. NCI Thesaurus. Code C116744.

A deoxycytosine analog with potential antineoplastic activity. Upon administration, DFP-10917 is phosphorylated to generate its nucleotide form that functions as a deoxycytosine mimic and is incorporated into DNA in tumor cells. This causes DNA strand breaks during polymerization due to beta-elimination during the fidelity checkpoint, which results in G2/M phase-arrest and tumor cell apoptosis.