Product Name: Gemcitabine

CAS No.: 95058-81-4

Cat. No.: HY-17026

MWT: 263.20

Formula: C9H11F2N3O4

Purity: >98%

Solubility: DMSO ≥12 mg/mL Water <1.2 mg/mL Ethanol <1.2 mg/mL

Mechanisms: Pathways: Cell Cycle/DNA Damage; Target: Nucleoside antimetabolite/analog

Biological Activity:

Gemcitabine (LY-188011; NSC 613327) is a DNA synthesis inhibitor with IC50 of 50 nM, 40 nM, 18 nM and 12 nM in PANC1, MIAPaCa2, BxPC3 and Capan2 cells, respectively.

IC50 Value: 50 nM( PANC1); 40 nM(MIAPaCa2); 18 nM(BxPC3 ); 12 nM(Capan2)

Target: Nucleoside antimetabolite/analog

Gemcitabine is converted intracellularly to the active metabolites difluorodeoxycytidine di- and triphosphate (dFdCDP, dFdCTP). dFdCDP inhibits ribonucleotide reductase, thereby decreasing the deoxynucleotide pool available for DNA synthesis; dFdCTP is incorporated into DNA, resulting in DNA strand termination and apoptosis. Gemcitabine inhibits proliferation BxPC-3 pancreatic cancer cell line with IC50 of 0.06 μM.

References:


Caution: Not fully tested. For research purposes only

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