

# Gemcitabine

英文名: Gemcitabine

别名: 吉西他滨; 4-氨基-1-[3,3-二氟-4-羟基-5-(羟甲基)氧杂环戊-2-基]嘧啶-2-酮; 4-Amino-1-[3,3-difluoro-4-hydroxy-5-(hydroxymethyl)oxolan-2-yl]pyrimidin-2-one

CAS 号: 95058-81-4

分子式: C<sub>9</sub>H<sub>11</sub>F<sub>2</sub>N<sub>3</sub>O<sub>4</sub>

分子量: 263.2

备注: Gemcitabine(Gemzar) belongs to the group of medicines called antimetabolites.

溶解性

DMSO 15 mg/mL

Water <1 mg/mL

Ethanol <1 mg/mL

贮存条件: 储存温度-20° C

描述:

产品介绍: 2'-Deoxy-2',2'-difluorocytidine is an irreversible inactivator of R1 and R2 (ribonucleoside diphosphate reductase, RDPR) from Escherichia coli.

用途: An irreversible inactivator of bacterial ribonucleoside diphosphate reductase.

生化机理

Gemcitabine is a widely used antitumor agents in both clinics and research labs. It is an antineoplastic agent and antimetabolite. 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 IC<sub>50</sub> of 0.06 μM.

