

Gemcitabine (elaidate)

Catalog No: tcsc3744



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

210829-30-4

Formula:

$C_{27}H_{43}F_2N_3O_5$

Pathway:

Cell Cycle/DNA Damage;Autophagy

Target:

Nucleoside Antimetabolite/Analog;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 26 mg/mL (49.28 mM)

Alternative Names:

CP-4126;CO-101;Gemcitabine 5'-elaidate

Observed Molecular Weight:

527.64

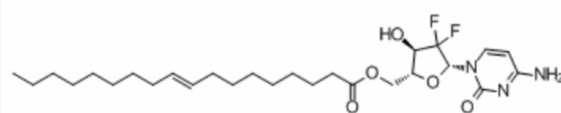
Product Description

Gemcitabine elaidate (CP-4126; CO-101) is a lipophilic, unsaturated fatty acid ester derivative of gemcitabine (dFdC), an antimetabolite deoxynucleoside analogue, with potential antineoplastic activity.

IC50 value:

Target: Gemcitabine analog

Upon hydrolysis intracellularly by esterases, the prodrug gemcitabine is converted into the active metabolites difluorodeoxycytidine di- and tri-phosphate (dFdCDP and dFdCTP) by deoxycytidine kinase. 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. Due to its lipophilicity, gemcitabine 5'-elaidic acid ester exhibits an increased cellular uptake and accumulation, resulting in an increased conversion to active metabolites, compared to gemcitabine. In addition, this formulation of gemcitabine may be less susceptible to deamination and deactivation by deoxycytidine deaminase. Check for active clinical trials or closed clinical trials using this agent.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!