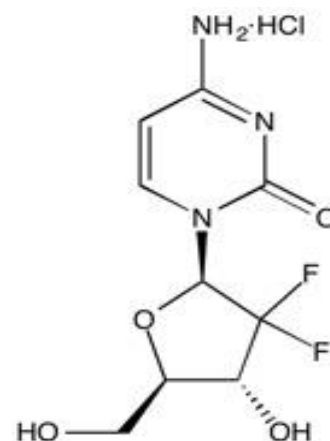


Catalog	Unit
TBI2140 - 10MG	10 mg
TBI2140 - 50MG	50 mg

Product Details

Formal Name: 2'-Deoxy-2',2'-difluorocytidine hydrochloride.
Alternate Name: dFdC
Molecular Formula: C₉H₁₁F₂N₃O₄·HCl.
Formula Weight: 299.70.
CAS Number: 122111-03-9
Purity: ≥98%
Formulation: Powder.
Solubility: Soluble in DMSO (up to 20 mg/ml) or in Water (up to 25 mg/ml).
Storage: -20°C.
Stability: ≥ 2 years.



Applications

Apoptosis inducer
 DNA synthesis and Cell death
 Infectious disease

Functions

Gemcitabine is a clinically useful anticancer agent. It exerts its cytotoxic effects via the metabolites gemcitabine diphosphate (dFdCDP) and gemcitabine triphosphate (dFdCTP). dFdCTP is an inhibitor of DNA polymerase and is incorporated into DNA resulting in termination of chain elongation and apoptosis. dFdCDP is an inhibitor of ribonucleotide reductase which results in depletion of deoxyribonucleotides needed for DNA synthesis. The phosphates have also been reported to inhibit cytidine triphosphate synthetase (CTP synthetase) and deoxycytidylate deaminase (dCMP deaminase). Topoisomerase 1 has also been shown to be a target for gemcitabine.

Application Procedures

First dissolved in DMSO (up to 20 mg/ml) or in water (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2614	ZVAD-FMK, Pan-caspase inhibitor
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI1029	Dorsomorphin, AMPK inhibitor

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