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## Product Datasheet

**Gemcitabine HCl, CAS [[122111-03-9]]**  
**FBM-10-2140**

Article Name	Gemcitabine HCl, CAS [[122111-03-9]]
Biozol Catalog Number	FBM-10-2140
Supplier Catalog Number	10-2140
Alternative Catalog Number	FBM-10-2140-10MG,FBM-10-2140-50MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	DNA polymerase inhibitor...
Molecular Weight	299.66
Purity	98%
Form	White solid
CAS Number	[122111-03-9]
Formula	C <sub>9</sub> H <sub>11</sub> F <sub>2</sub> N <sub>3</sub> O <sub>4</sub> HCl
Application Notes	<p>Gemcitabine is a clinically useful anticancer agent.<sup>1</sup> It exerts its cytotoxic effects via the metabolites gemcitabine diphosphate (dFdCDP) and gemcitabine triphosphate (dFdCTP). dFdCTP is an inhibitor of DNA polymerase and is also incorporated in DNA strands 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. Gemcitabine metabolites have also been reported to inhibit cytidine triphosphate synthetase (CTP synthetase)<sup>2</sup> and deoxycytidylate deaminase (dCMP deaminase)<sup>3</sup>. Topoisomerase 1 has also been shown to be a target for gemcitabine.<sup>4</sup></p>