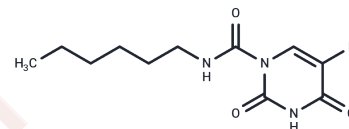


Carmofur

Chemical Properties

CAS No. :	61422-45-5
Formula:	C ₁₁ H ₁₆ FN ₃ O ₃
Molecular Weight:	257.26
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Carmofur (HCFU) is a highly potent acid ceramidase inhibitor, used in the treatment of breast and colorectal cancer. Carmofur has been known to induce leukoencephalopathy.
Targets(IC50)	Nucleoside Antimetabolite/Analog,FAAH,Glutathione Peroxidase,DNA/RNA Synthesis, SARS-CoV,Virus Protease
In vitro	Carmofur is one of the masked compounds of 5-FU, which was modified for more potent antineoplastic activity and less toxicity. Carmofur is converted in vivo into 5-FU directly or via intermetabolites, such as 1-(carboxypentylcarbomoyl)-5-fluorouracil and/or 1-(carboxypropylcarbomoyl)-5-fluorouraci. Carmofur and its metabolites gradually accumulate in the brain during continuous administration and are removed very slowly. Carmofur has potent neurotoxicity which can produce severe leukoencephalopathy resembling methotrexate leukoencephalopathy both clinically and on brain CT, together with a cerebellar syndrome similar to that following 5-FU neurotoxicity. [1]

Solubility Information

Solubility	DMSO: 250 mg/mL (971.78 mM),Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 10 mg/mL (38.87 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8871 mL	19.4356 mL	38.8712 mL
5 mM	0.7774 mL	3.8871 mL	7.7742 mL
10 mM	0.3887 mL	1.9436 mL	3.8871 mL
50 mM	0.0777 mL	0.3887 mL	0.7774 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kuzuhara S, et al. *J Neurol*,1987, 234(6), 365-370.

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Akiba T, et al. *Acta Neuropathol*,1996, 92(1), 8-13.

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Bowden G D, Land K M, O'Connor R M, et al. High-throughput screen of drug repurposing library identifies inhibitors of *Sarcocystis neurona* growth[J]. *International Journal for Parasitology: Drugs and Drug Resistance*. 2018 Apr; 8(1): 137-144.

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