Cidofovir

Catalog No.C07861 Batch:C0786103

Product Datasheet

Technical Data

Formula	$C_8H_{14}N_3O_6P$		
Molecular Weight	279.19	**CAS No.**	113852-37-2
Solubility (25°C)*	In vitro	Water	5 mg/mL (17.9 mM)
		DMSO	Insoluble
		Ethanol	Insoluble

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.5818 mL	17.9090 mL	35.8179 mL
5 mM	0.7164 mL	3.5818 mL	7.1636 mL
10 mM	0.3582 mL	1.7909 mL	3.5818 mL
50 mM	-	-	-

Biological Activity

Description	Cidofovir suppresses virus replication by selective inhibition of viral DNA synthesis.
In vitro	Cidofovir inhibits human cytomegalovirus (HCMV) infection in cultured cells. This compound is inhibitory to CMV plaque formation even when added to the cells at 48 hr post infection with IC50 of 0.9 μg/mL for Davis and 1.6 μg/mL for AD-169 strains,respectively. [1] It also inhibits herpes simplex virus infection. In addition, this chemical blocks cell fusion induced by HSV-1 in monkey kidney cells and blocks the expression of HSV-I-specific proteins and the synthesis of viral DNA. [3]
In vivo	Cidofovir (5 mg/kg/day) subcutaneously for 5 days significantly reduces average virus infectivity titer in blood, spleen, lung and salivary gland in infected guinea pigs. This compound significantly reduces lymphocytosis and average tissue indexe of spleen in infected animals. [2]. It suppresses all manifestations (skin lesions, paralysis of the hind legs, and mortality) of hairless mice infected intracutaneously with HSV-1 or HSV-2. The most remarkable feature of this compound is that a single administration of the compound, even as late as 4 days after infection, conferees significant protection against HSV-1 or HSV-2 infection. [4] This chemical inhibits growth of the highly aggressive melanoma tumor arising from mouse melanoma B16 cells grafted subcutaneously in C57B16/J mice. [5]

References

https://pubmed.ncbi.nlm.nih.gov/2854454/ https://pubmed.ncbi.nlm.nih.gov/2168690/ https://pubmed.ncbi.nlm.nih.gov/1332603/

+ Expand

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com