Product Datasheet

Technical Data

Formula	$C_{10}H_{15}N_5O_3$					
Molecular Weight	253.26	**CAS No.**	39809-25-1			
Solubility (25°C)*	In vitro	DMSO	34 mg/mL (134.24 mM)			
		Water	1 mg/mL (3.94 mM)			
		Ethanol	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <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	3.9485 mL	19.7426 mL	39.4851 mL
5 mM	0.7897 mL	3.9485 mL	7.8970 mL
10 mM	0.3949 mL	1.9743 mL	3.9485 mL
50 mM	0.0790 mL	0.3949 mL	0.7897 mL

Biological Activity

Description	Penciclovir (BRL-39123, VSA 671,NSC-759624) is a purine acyclic nucleoside analogue with potent antiviral activity.
In vitro	Penciclovir is a guanine analogue antiviral drug used for the treatment of various herpesvirus infections. It is a nucleoside analogue which exhibits low toxicity and good selectivity. This compound is a selective antiherpesvirus agent, particularly against herpes simplex virus types 1 and 2 (HSV-1 and HSV-2) and varicella-zoster virus (VZV). It is converted to its active form, penciclovir triphosphate, by cellular kinases. It inhibits viral DNA polymerase by competing with deoxyguanosine triphosphate. It inhibits DNA synthesis of virus-infected cells. This chemical has in vitro activity against herpes simplex virus types 1 (HSV-1) and 2 (HSV-2). It does not inhibit DNA synthesis in non-infected cells. Mode of resistance is via qualitative changes in viral thymidine kinase or DNA polymerase. [1] It has activity against several herpes viruses with IC50 of 37.9 μM for HHV-6A and 77.8 μM for HHV-6B. [2] Herpes simplex virus-1 studies indicate that this compound induces apoptosis without causing much genotoxicity. [3]

References

https://pubmed.ncbi.nlm.nih.gov/1336346/ https://pubmed.ncbi.nlm.nih.gov/11345533/ https://pubmed.ncbi.nlm.nih.gov/10678363/

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.

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