Product Datasheet

Technical Data

Formula	$C_{23}H_{23}ClFNO_5$					
Molecular Weight	447.88	**CAS No.**	697761-98-1			
Solubility (25°C)*	In vitro	DMSO	89 mg/mL (198.71 mM)			
		Ethanol	89 mg/mL (198.71 mM)			
		Water	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.
		Injection	Clear solution	5%DMSO [1]→ Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	1.000mg/ml (2.23mM)	Taking the 1 mL working solution as an example, add 50 μL of 20 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <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	2.2327 mL	11.1637 mL	22.3274 mL
5 mM	0.4465 mL	2.2327 mL	4.4655 mL
10 mM	0.2233 mL	1.1164 mL	2.2327 mL
50 mM	0.0447 mL	0.2233 mL	0.4465 mL

Biological Activity

Description	Elvitegravir is an HIV integrase inhibitor for **HIV-1 IIIB**, **HIV-2 EHO** and **HIV-2 ROD** with **IC50** of 0.7 nM, 2.8 nM and 1.4 nM in cell-free assays, respectively.
Targets	HIV-1 IIIB [1] (Cell-free assay): 0.7 nM HIV-2 ROD [1] (Cell-free assay): 1.4 nM HIV-2 EHO [1] (Cell-free assay): 2.8 nM
In vitro	Elvitegravir inhibits PBMC and PA with IC50 of 0.89 and 20 nM, respectively. This compound prevents the integration of HIV-1 cDNA through the inhibition of DNA strand transfer. It suppresses the replication of HIV-1, including various subtypes and multiple-drug-resistant clinical isolates, and HIV-2 strains with a 50% effective concentration in the subnanomolar to nanomolar range. This inhibitor blocks the replication of HIV-1 clinical isolates carrying NRTI, NNRTI, and PI resistance-associated genotypes. It inhibits the HIV replication at a step that occurs after reverse transcription but before proteolytic cleavage, consistent with the integration step. This chemical inhibits the synthesis of strand transfer products with an IC50 of 54 nM. It blocks integration via the inhibition of IN-mediated strand transfer. [1] This agent inhibits the integration of the HIV-based vector used as a positive control for the luciferase assay with an EC50 of 0.8 nM, as observed in the MAGI assay with HIV-1IIIB. It suppresses the replication of MLV infection with IC50 of 5.8 nM as well as that of the primate retrovirus SIV (IC50 = 0.5 nM), revealing that IN inhibitors have antiviral activity against a broad range of retroviruses. This compound is active against HIV-1 and HIV-2 and has a serum-free antiviral IC50 of 0.3-0.9 nM in peripheral blood mononuclear cells. [2]

References

https://pubmed.ncbi.nlm.nih.gov/17977962/
https://pubmed.ncbi.nlm.nih.gov/22149610/

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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