Product Datasheet

Technical Data

Formula	$C_{21}H_{18}F_3N_3O_5$					
Molecular Weight	449.38	**CAS No.**	1611493-60-7			
Solubility (25°C)*	In vitro	DMSO	90 mg/mL (200.27 mM)			
		Ethanol	90 mg/mL (200.27 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]→ 40%PEG300 [2]→ 5%Tween80 [3]→ 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	4.500mg/ml (10.01mM)	Taking the 1 mL working solution as an example, add 50 μL of 90 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1]→ 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.750mg/ml (1.67mM)	Taking the 1 mL working solution as an example, add 50 μL of 15 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	2.2253 mL	11.1264 mL	22.2529 mL
5 mM	0.4451 mL	2.2253 mL	4.4506 mL
10 mM	0.2225 mL	1.1126 mL	2.2253 mL
50 mM	0.0445 mL	0.2225 mL	0.4451 mL

Biological Activity

Description	Bictegravir (GS-9883) is a novel, potent, once-daily, unboosted inhibitor of **HIV-1 integrase**.
Targets	HIV-1 integrase [1]
In vitro	Bictegravir exhibits potent and selective in vitro antiretroviral activity in both T-cell lines and primary human T lymphocytes, with 50% effective concentrations ranging from 1.5 to 2.4 nM and selectivity indices up to 8,700 relative to cytotoxicity. This compound inhibits the strand transfer activity with an IC50 of 7.5 ± 0.3 nM. Relative to its inhibition of strand transfer activity, it is a much weaker inhibitor of 3'-processing activity of HIV-1 integrase, with an IC50 of 241 ± 51 nM. This chemical potently inhibits HIV-1 replication in both MT-2 and MT-4 cells with EC50s of 1.5 and 2.4 nM, respectively, and selectivity indices (50% cytotoxic concentration [CC50]/EC50) of ~6,800 in MT-2 cells and ~1,500 in MT-4 cells[1].

References

https://pubmed.ncbi.nlm.nih.gov/27645238/

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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