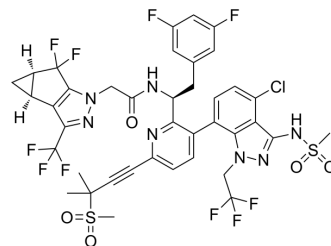


Lenacapavir

Cat. No.:	HY-111964		
CAS No.:	2189684-44-2		
Molecular Formula:	C ₃₉ H ₃₂ ClF ₁₀ N ₇ O ₅ S ₂		
Molecular Weight:	968.28		
Target:	HIV		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 200 mg/mL (206.55 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	1.0328 mL	5.1638 mL	10.3276 mL
		5 mM	0.2066 mL	1.0328 mL	2.0655 mL
10 mM		0.1033 mL	0.5164 mL	1.0328 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 6.25 mg/mL (6.45 mM); Clear solution Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline Solubility: 2.5 mg/mL (2.58 mM); Suspended solution; Need ultrasonic 				

BIOLOGICAL ACTIVITY

Description	Lenacapavir (GS-6207) is a HIV-1 capsid inhibitor. Lenacapavir shows anti-HIV activity with an EC ₅₀ of 100 pM in MT-4 cells. Lenacapavir displays a mean EC ₅₀ of 50 pM (20-160 pM) against 23 HIV-1 clinical isolates from different subtypes in peripheral blood mononuclear cells (PBMCs) ^[1] . Lenacapavir is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.
IC₅₀ & Target	HIV-1
In Vitro	Lenacapavir (GS-6207) is a potent capsid-targeting inhibitor of HIV replication. Lenacapavir shows sub-nanomolar potency in target cells (EC ₅₀ =23 pM), in a full-cycle assay (EC ₅₀ =25 pM) and in producer cells (EC ₅₀ =439 pM). Lenacapavir interferes with both the early and late stages of HIV-1 replication but exhibits greater potency against the early stage ^[2] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Sci Adv. 2024 Mar;10(9):eadn0042.
- PLoS Pathog. 2023 Jun 2;19(6):e1011423.
- Viruses. 2022 May 31;14(6):1202.
- bioRxiv. 2023 Oct 1.

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REFERENCES

- [1]. Singh K, et al. GS-CA Compounds: First-In-Class HIV-1 Capsid Inhibitors Covering Multiple Grounds. Front Microbiol. 2019 Jun 20;10:1227.
- [2]. John O Link, et al. Clinical targeting of HIV capsid protein with a long-acting small molecule. Nature. 2020 Jul 1.
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Caution: Product has not been fully validated for medical applications. For research use only.

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