Product Data Sheet

HBV-IN-45

Cat. No.: HY-163516

 $\label{eq:molecular-formula:} \textbf{Molecular Formula:} \qquad \textbf{C}_{16}\textbf{H}_{16}\textbf{N}_2\textbf{O}_2\textbf{S}$

Molecular Weight: 300.38

Target: HBV

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	HBV-IN-45 is a selective and orally active HBV capsid assembly modulator with an IC $_{50}$ of 0.51 μ M for HBcAg in HBC cells. HBV-IN-45 shows potent anti-HBV activities $^{[1]}$.	
In Vitro	HBV-IN-45 (compound 26f) inhibits the growth of HepG2 cells with a CC5 $_{50}$ values of 84.29 μ M. HBV-IN-45 also inhibits HBV DNA in HepAD38 cell supernatant with an EC $_{50}$ of 2.24 μ M $^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	HBV-IN-45 (compound 26f; 100 mg/kg; oral administration; twice daily; for 14 days) inhibits HBV DNA copy numbers in plasma, and the HBeAg and liver enzymes GPT (ALT) in mouse serum have no difference ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Male BALB/c mice injected with replication-competent HBV 1.3 DNA plasmid $^{[1]}$
	Dosage:	100 mg/kg
	Administration:	Oral administration; twice daily; for 14 days
	Result:	HBV DNA copy numbers were rapidly and markedly reduced in plasma.

REFERENCES

[1]. Kaixin Du, et al. Development of benzimidazole-based compounds as novel capsid assembly modulators for the treatment of HBV infection. Eur J Med Chem. 2024 Apr 16:271:116402.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA