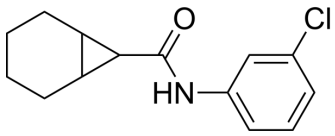
BA-53038B

Cat. No.:	HY-114314
CAS No.:	2306195-65-1
Molecular Formula:	$C_{14}H_{16}ClNO$
Molecular Weight:	249.74
Target:	HBV
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (1001.04 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0042 mL	20.0208 mL	40.0416 mL
	5 mM	0.8008 mL	4.0042 mL	8.0083 mL
	10 mM	0.4004 mL	2.0021 mL	4.0042 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

BA-53038B is a HBV core protein allosteric modulator (CpAM), binding to the HAP pocket and modulating HBV capsid assembly. BA-53038B has antiviral activity for hepatitis B virus (HBV) with an EC_{50} value of 3.32 μM. BA-53038B can be used for the research of chronic hepatitis B[1].

IC_{50} & Target

EC 50: 3.32 μM (HBV)[1]

In Vitro

BA-53038B has antiviral activity for HBV with an EC_{50} value of 3.32 μM[1].
BA-53038B has cytotoxicity with CC_{50} value of >100 μM[1].
BA-53038B (5 μM; 48 h) induces the capsid/nucleocapsid mobility shift and reduced the amount of hypophosphorylated core protein[1].
BA-53038B (0-20 μM; 2 or 6 days) inhibits HBV nucleocapsid assembly[1].
BA-53038B (5 μM; 2 days) inhibits pgRNA encapsidation and consequentially reduces the amount of DNA-containing capsids and hypophosphorylated core protein[1].
BA-53038B (2 μM; 6 h) modulates HBV capsid assembly by binding to the HAP pocket[1].
BA-53038B has resistant effect with an EC_{50} value of >10 μM on HBV capsid (HepG2 cells transiently transfected

pHBV1.3/core-V124W)[1].

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

Western Blot Analysis[1]

Cell Line:	AML12HBV10 cells
Concentration:	5 μM
Incubation Time:	48 h
Result:	Reduced the amount of hypophosphorylated core protein and promoted the assembly of empty capsids with slow electrophoresis mobility.

RT-PCR[1]

Cell Line:	AML12HBV10 and HepDES19 cells
Concentration:	0-20 μM
Incubation Time:	2 or 6 days
Result:	Inhibited HBV replication in both AML12HBV10 and HepDES19 cells.

REFERENCES

[1]. Zhang X, et al. Discovery of Novel Hepatitis B Virus Nucleocapsid Assembly Inhibitors. ACS Infect Dis. 2019 May 10;5(5):759-768.

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