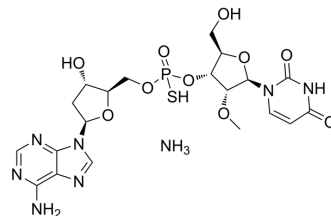


Inarigivir ammonium

Cat. No.:	HY-101954A
CAS No.:	2172788-92-8
Molecular Formula:	C ₂₀ H ₂₉ N ₈ O ₁₀ PS
Molecular Weight:	604.53
Target:	HBV
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (165.42 mM; Need ultrasonic)					
	H ₂ O : 100 mg/mL (165.42 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.6542 mL	8.2709 mL	16.5418 mL
5 mM			0.3308 mL	1.6542 mL	3.3084 mL	
	10 mM		0.1654 mL	0.8271 mL	1.6542 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (165.42 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	Inarigivir (ORI-9020) ammonium is a dinucleotide antiviral drug that can significantly reduce liver HBV DNA in transgenic mice expressing hepatitis B virus. Inarigivir (ORI-9020) ammonium acts as a RIG-I (Retinoic acid-inducible gene-I) agonist to activate cellular innate immune responses ^{[1][2]} .
IC₅₀ & Target	Target: HBV ^[1] .
In Vitro	Inarigivir (SB 9200) is active against HBV variants carrying resistance markers against all the nucleos(t)ide analogues approved for treating chronic hepatitis B ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Inarigivir (100 mg/kg/day, ip) significantly reduces viral DNA in the liver and shows anti-HBV activity. Serum HBV DNA is not reduced in response to treatment. Inarigivir does not affect levels of HBV RNA in liver, levels of HBeAg in serum, or mean titers of HBsAg. The minimal effective dose is identified to be between 1.6 and 0.5 mg/kg/day using liver HBV DNA values ^[1] .

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

Animal Model:	Mice ^[1]
Dosage:	100 mg/kg.
Administration:	IP, daily.
Result:	Significantly reduced viral DNA in the liver and shows anti-HBV activity similar ADV positive control.

REFERENCES

[1]. Iyer RP, et al. Anti-hepatitis B virus activity of ORI-9020, a novel phosphorothioate dinucleotide, in a transgenic mouse model. *Antimicrob Agents Chemother.* 2004 Jun;48(6):2318-20.

[2]. Danni Colledge, et al. The Novel Antiviral Agent Inarigivir Inhibits Both Nucleos(t)ide Analogue and Capsid Assembly Inhibitor Resistant HBV in vitro.

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