Nucleoside-Analog-2

Cat. No.:	HY-77652				
CAS No.:	876708-01-9				
Molecular Formula:	C ₉ H ₁₁ N ₅ O ₆				
Molecular Weight:	285.21				
Target:	Nucleoside Antimetabolite/Analog; HCV				
Pathway:	Cell Cycle/DNA Damage; 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 : 33.33 mg, H ₂ O : 20 mg/mL (Preparing Stock Solutions	DMSO : 33.33 mg/mL (116.86 mM; Need ultrasonic) H ₂ O : 20 mg/mL (70.12 mM; Need ultrasonic)							
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg			
		1 mM	3.5061 mL	17.5307 mL	35.0615 mL			
		5 mM	0.7012 mL	3.5061 mL	7.0123 mL			
		10 mM	0.3506 mL	1.7531 mL	3.5061 mL			
	Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: PBS Solubility: 16.67 mg/mL (58.45 mM); Clear solution; Need ultrasonic and warming and heat to 60°C							
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (8.77 mM); Clear solution; Need ultrasonic							
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (8.77 mM); Clear solution; Need ultrasonic							
	4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (8.77 mM); Clear solution; Need ultrasonic							

BIOLOGICAL ACTIVITY

Description

Nucleoside-Analog-2 is a 4'-Azidocytidine analogue against Hepatitis C virus (HCV) replication. Nucleoside-Analog-2 is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition reaction (CuAAc) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN groups.

HON

, N⁺ OH 0

ΝH



In Vitro

Nucleoside-Analog-2 is a 4'-Azidocytidine analogue against Hepatitis C virus (HCV) replication. Reference to compound 12^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Antiviral Res. 2019 Oct;170:104570.

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REFERENCES

[1]. Smith DB, et al. The design, synthesis, and antiviral activity of 4'-azidocytidine analogues against hepatitis C virus replication: the discovery of 4'-azidoarabinocytidine. J Med Chem. 2009 Jan 8;52(1):219-23.

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

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