7-Methylguanosine

MedChemExpress

®

Cat. No.:	HY-122524				
CAS No.:	20244-86-4				
Molecular Formula:	C ₁₁ H ₁₅ N ₅ O ₅				
Molecular Weight:	297.27				
Target:	Nucleoside Antimetabolite/Analog; Endogenous Metabolite				
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease				
Storage:	Powder	-20°C	3 years		
		4°C	2 years		
	In solvent	-80°C	6 months		
		-20°C	1 month		

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 25 mg/mL (84.10 mM; ultrasonic and warming and heat to 60°C) DMSO : 12.5 mg/mL (42.05 mM; Need ultrasonic)								
Preparing Stock Solutions		Solvent Mass Concentration	1 mg	5 mg	10 mg				
		1 mM	3.3639 mL	16.8197 mL	33.6395 mL				
		5 mM	0.6728 mL	3.3639 mL	6.7279 mL				
		10 mM	0.3364 mL	1.6820 mL	3.3639 mL				
	Please refer to the so	lubility information to select the app	propriate solvent.						
In Vivo		1. Add each solvent one by one: PBS Solubility: 8.33 mg/mL (28.02 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: ≥ 1.25 mg/mL (4.20 mM); Clear solution							
		3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (4.20 mM); Clear solution							
		 Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (4.20 mM); Clear solution 							

BIOLOGICAL ACTIV	
Description	7-Methylguanosine is a novel cNIIIB nucleotidase inhibitor with IC $_{50}$ value of 87.8 \pm 7.5 $\mu M.$
IC ₅₀ & Target	Human Endogenous Metabolite

HO

OH OH

NH₂

REFERENCES

[1]. Kozarski M, et al. 7-Methylguanosine monophosphate analogues with 5'-(1,2,3-triazoyl) moiety: Synthesis and evaluation as the inhibitors of cNIIIB nucleotidase. Bioorg Med Chem. 2018 Jan 1;26(1):191-199.

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

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