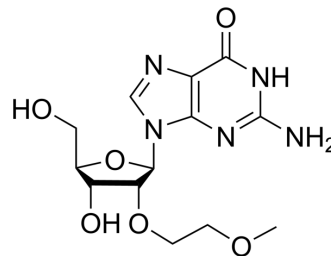


2'-O-(2-Methoxyethyl)guanosine

Cat. No.:	HY-23789
CAS No.:	473278-54-5
Molecular Formula:	C ₁₃ H ₁₉ N ₅ O ₆
Molecular Weight:	341.32
Target:	Nucleoside Antimetabolite/Analog
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (292.98 mM); ultrasonic and warming and heat to 60°C				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.9298 mL	14.6490 mL	29.2980 mL
		5 mM	0.5860 mL	2.9298 mL	5.8596 mL
	10 mM	0.2930 mL	1.4649 mL	2.9298 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.09 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.09 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.09 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	2'-O-(2-Methoxyethyl)guanosine (2'-O-MOE-rG), a 2'-O-methoxyethyl-modified nucleoside, can be produced by enzymatic conversion (adenosine deaminase) from 2'-O-(2-methoxyethyl)-2,6-diaminopurine riboside. 2'-O-(2-Methoxyethyl)guanosine neither effectively phosphorylated by cytosolic nucleoside kinases, nor are they incorporated into cellular DNA or RNA ^{[1][2]} .
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REFERENCES

[1]. McPherson AK, et, al. An Improved Process for the Manufacture of 5'-O-(4,4'-Dimethoxytrityl)-N2-isobutyryl-2'-O-(2-methoxyethyl)guanosine. Org. Process Res. Dev. 2020, 24, 11, 2583-2590.

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