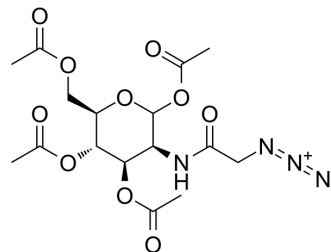


Ac4ManNAz (80% α isomer)

Cat. No.:	HY-118297		
CAS No.:	361154-30-5		
Molecular Formula:	C ₁₆ H ₂₂ N ₄ O ₁₀		
Molecular Weight:	430.37		
Target:	Biochemical Assay Reagents		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (232.36 mM; Need ultrasonic)
 H₂O : 2.5 mg/mL (5.81 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.3236 mL	11.6179 mL	23.2358 mL
	5 mM	0.4647 mL	2.3236 mL	4.6472 mL
	10 mM	0.2324 mL	1.1618 mL	2.3236 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: \geq 2.5 mg/mL (5.81 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline)
Solubility: \geq 2.5 mg/mL (5.81 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: \geq 2.5 mg/mL (5.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ac4ManNAz (80% α isomer) is an azide-containing metabolic glycoprotein labeling reagent that can selectively modify proteins. Ac4ManNAz can be used for cell labeling, tracking and proteomic analysis. Ac4ManNAz (80% α isomer) contains Azide groups and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Alkyne groups. Ac4ManNAz (80% α isomer) can also undergo strain-promoted alkyne-azide cycloaddition (SPAAC) with molecules containing DBCO or BCN groups.

In Vitro

Ac4ManNAz (10 μ M) shows the least effect on cellular systems and has a sufficient labeling efficiency for cell labeling,

tracking and proteomic analysis^[1].

Ac4ManNAz (50 μ M) leads to the reduction of major cellular functions, including energy generation capacity, cellular infiltration ability and channel activity^[1].

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

CUSTOMER VALIDATION

- Adv Funct Mater. 2023 Jan 27.
- Nat Commun. 2023 Oct 31;14(1):6953.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Han SS, et, al. Physiological Effects of Ac4ManNAz and Optimization of Metabolic Labeling for Cell Tracking. Theranostics. 2017 Mar 1;7(5):1164-1176.

[2]. Han SS, et, al. Safety and Optimization of Metabolic Labeling of Endothelial Progenitor Cells for Tracking. Sci Rep. 2018 Sep 4;8(1):13212.

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

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