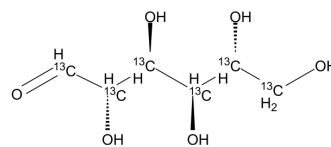


D-Mannose-¹³C₆

Cat. No.:	HY-N0379S22
CAS No.:	287100-74-7
Molecular Formula:	¹³ C ₆ H ₁₂ O ₆
Molecular Weight:	186.11
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 250 mg/mL (1343.29 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	5.3732 mL	26.8658 mL	53.7317 mL
	5 mM	1.0746 mL	5.3732 mL	10.7463 mL
	10 mM	0.5373 mL	2.6866 mL	5.3732 mL

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

BIOLOGICAL ACTIVITY

Description

D-Mannose-¹³C₆ is a carbohydrate, which plays an important role in human metabolism, especially in the glycosylation of specific proteins[2].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-216.
- [2]. Genovese C, et al. Effects of a new combination of plant extracts plus d-mannose for the management of uncomplicated recurrent urinary tract infections. *J Chemother.* 2018 Apr;30(2):107-114.

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

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