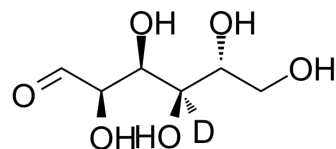


D-Glucose-d₁

Cat. No.:	HY-B0389S1									
CAS No.:	56570-89-9									
Molecular Formula:	C ₆ H ₁₁ DO ₆									
Molecular Weight:	181.16									
Target:	Endogenous Metabolite; Isotope-Labeled Compounds									
Pathway:	Metabolic Enzyme/Protease; Others									
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years	In solvent	-80°C	6 months		-20°C	1 month
Powder	-20°C	3 years								
In solvent	-80°C	6 months								
	-20°C	1 month								



SOLVENT & SOLUBILITY

In Vitro

H₂O : 100 mg/mL (552.00 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.5200 mL	27.5999 mL	55.1998 mL
5 mM	1.1040 mL	5.5200 mL	11.0400 mL
10 mM	0.5520 mL	2.7600 mL	5.5200 mL

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

BIOLOGICAL ACTIVITY

Description

D-Glucose-d is the deuterium labeled D-Glucose. D-Glucose (Glucose), a monosaccharide, is an important carbohydrate in biology. D-Glucose is a carbohydrate sweetener and critical components of the general metabolism, and serve as critical signaling molec

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]. Jin Jiaojiao, et al. D-glucose, D-galactose, and D-lactose non-enzyme quantitative and qualitative analysis method based on Cu foam electrode. *Food Chem*. 2015 May 15;175:485-93.

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

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