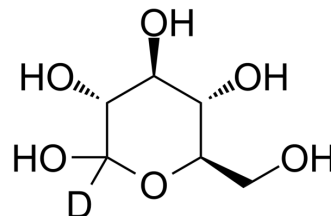


## D-Glucose-d<sub>1-4</sub>

Cat. No.:	HY-B0389S8
CAS No.:	106032-61-5
Molecular Formula:	C <sub>6</sub> H <sub>11</sub> DO <sub>6</sub>
Molecular Weight:	181.16
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### BIOLOGICAL ACTIVITY

#### Description

D-Glucose-d-44 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 molecules in relation to both cellular metabolic status and biotic and abiotic stress response[1].

#### 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<sup>[1]</sup>.  
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;53(2):211-216.

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

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