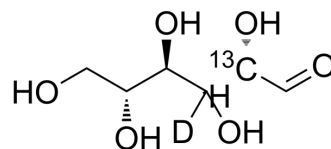


## D-Mannose-<sup>13</sup>C,d-2

<b>Cat. No.:</b>	HY-N0379S20
<b>Molecular Formula:</b>	C <sub>5</sub> <sup>13</sup> CH <sub>11</sub> DO <sub>6</sub>
<b>Molecular Weight:</b>	182.15
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	D-Mannose- <sup>13</sup> C,d-2 is the deuterium and <sup>13</sup> C labeled D-Mannose. D-Mannose is a carbohydrate, which plays an important role in human metabolism, especially in the glycosylation of specific proteins [1][2].
<b>In Vitro</b>	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.**

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