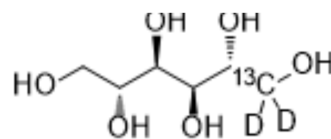


## D-Mannitol-<sup>13</sup>C,<sub>2</sub>

<b>Cat. No.:</b>	HY-N0378S6
<b>CAS No.:</b>	1217463-58-5
<b>Molecular Formula:</b>	C <sub>5</sub> <sup>13</sup> CH <sub>12</sub> D <sub>2</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	185.18
<b>Target:</b>	Apoptosis; Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Apoptosis; 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-Mannitol- <sup>13</sup> C, <sub>2</sub> is the deuterium and <sup>13</sup> C labeled D-Mannitol.
<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 <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 Feb;53(2):211-216.
- [2]. Tan, K., et al., The mannitol operon repressor MtlR belongs to a new class of transcription regulators in bacteria. *J Biol Chem*, 2009. 284(52): p. 36670-9.; Nishiyama, A., et al., Mannitol lowers fat digestibility and body fat accumulation in both normal a

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

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