

Product Data Sheet

D-(+)-Trehalose-d₁₄

Cat. No.: HY-N1132S CAS No.: 2028292-31-9 Molecular Formula: C₁₂H₈D₁₄O₁₁

Molecular Weight: 356.38

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	D-(+)-Trehalose- d_{14} is the deuterium labeled D-(+)-Trehalose. D-(+)-Trehalose, isolated from Saccharomyces cerevisiae, can be used as a food ingredient and pharmaceutical excipi[1][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]. Megarry AJ, et al. Amorphous trehalose dihydrate by cryogenic milling. Carbohydr Res. 2011 Jun 1;346(8):1061-4.

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

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