Product Data Sheet

Allitol-13C

Cat. No.: HY-N2840S Molecular Formula: $C_5^{13}CH_{14}O_6$ Molecular Weight: 183.16

Target: Isotope-Labeled Compounds

Pathway: Others

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

Analysis.

$$H_2$$
 $\stackrel{\text{QH}}{\downarrow}$ $\stackrel{\text{QH}}{\downarrow}$ $\stackrel{\text{OH}}{\downarrow}$ $\stackrel{\text{OH}}{\downarrow}$ $\stackrel{\text{OH}}{\downarrow}$

BIOLOGICAL ACTIVITY

Description	Allitol- ¹³ C is the ¹³ C labeled Allitol. Allitol is a rare natural polyol that can be used as a sweetener. Allitol is an important intermediate for the preparation of the agents which against diabetes, cancer, and viral infections, including AIDS[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 ^[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]. Zhu Y, et al. Construction of allitol synthesis pathway by multi-enzyme coexpression in Escherichia coli and its application in allitol production. J Ind Microbiol Biotechnol. 2015 May;42(5):661-9.

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

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