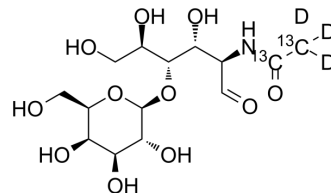


N-Acetyllactosamine-13C2,d3

Cat. No.:	HY-126854S1
Molecular Formula:	C ₁₂ ¹³ C ₂ H ₂₂ D ₃ NO ₁₁
Molecular Weight:	388.35
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	N-Acetyllactosamine-13C2,d3 (LacNAc-13C2,d3) is the deuterium and 13C labeled N-Acetyllactosamine (HY-126854). N-Acetyllactosamine, a nitrogen-containing disaccharide, is an important component of various oligosaccharides such as glycoproteins and sialyl Lewis X. N-Acetyllactosamine can be used as the starting material for the synthesis of various oligosaccharides. N-Acetyllactosamine has prebiotic effects ^{[1][2][3]} .
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]. Endo T, Koizumi S, Tabata K, Kakita S, Ozaki A. Large-scale production of N-acetyllactosamine through bacterial coupling. *Carbohydr Res*. 1999 Mar 31;316(1-4):179-83.
- [3]. M.Karimi Alavijeh, et al. Simulation and economic assessment of large-scale enzymatic N-acetyllactosamine manufacture. *Biochemical Engineering Journal*. Volume 154, 15 February 2020, 107459

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

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