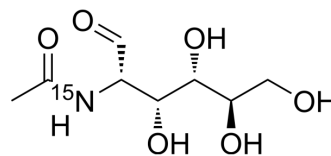


N-Acetyl-D-mannosamine-¹⁵N

Cat. No.:	HY-128850S5
Molecular Formula:	C ₈ H ₁₅ ¹⁵ N ₁ O ₆
Molecular Weight:	222.2
Target:	Bacterial; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	N-Acetyl-D-mannosamine- ¹⁵ N is the ¹⁵ N labeled N-Acetyl-D-mannosamine. N-Acetyl-D-mannosamine (ManNAc) is an essential precursor of N-acetylneuraminic acid (NeuAc), the specific monomer of bacterial capsular polysialic acid (PA)[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]. Revilla-Nuin B, et al. Transport of N-acetyl-D-mannosamine and N-acetyl-D-glucosamine in Escherichia coli K1: effect on capsular polysialic acid production. *FEBS Lett*. 2002 Jan 30;511(1-3):97-101.; Hayakawa K, et al. Reactivation of hyperglycemia-induced h

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

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