## **Product** Data Sheet

## N-Acetyl-D-glucosamine-13C2,15N

Cat. No.: HY-A0132S10 CAS No.: 478529-44-1 Molecular Formula:  $C_6^{13}C_2H_{15}^{15}NO_6$ 

Molecular Weight: 224.19

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

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

Analysis.

## **BIOLOGICAL ACTIVITY**

| Description | $N-Acetyl-D-glucosamine-13C2,15N is the 13C and 15N labeled N-Acetyl-D-glucosamine. N-Acetyl-D-Glucosamine (N-Acetyl-2-amino-2-deoxy-D-glucose) is a monosaccharide derivative of gluc ^{[1][2]}.$   |
|-------------|--|
| 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 <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]. Slawson C, et al. O-GlcNAc cycling: how a single sugar post-translational modification is changing the way we think about signaling networks. J Cell Biochem. 2006 Jan 1;97(1):71-83.

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

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