# RedChemExpress

# Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

## Glucosamine-<sup>13</sup>C hydrochloride

| Cat. No.:<br>CAS No.:<br>Molecular Formula:<br>Molecular Weight: | HY-N0733S<br>84247-63-2<br>C <sub>5</sub> <sup>13</sup> CH <sub>14</sub> CINO <sub>5</sub><br>216.62                | OH NH <sub>2</sub><br>HO |
|--|---|--------------------------|
| Target:  | Autophagy; Endogenous Metabolite; HIF/HIF Prolyl-Hydroxylase; Reactive Oxygen<br>Species; Isotope-Labeled Compounds | Ь́Н О́Н <sup>Н</sup> НСІ |
| Pathway:   | Autophagy; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others  |                          |
| Storage:   | Please store the product under the recommended conditions in the Certificate of Analysis.                           |                          |

| BIOLOGICAL ACTIVITY |   |  |
|---------------------|---|--|
| Description         | Glucosamine- <sup>13</sup> C (hydrochloride) is the <sup>13</sup> C labeled Glucosamine hydrochloride. Glucosamine hydrochloride (D-<br>Glucosamine hydrochloride) is an amino sugar and a prominent precursor in the biochemical synthesis of glycosylated<br>proteins and lipids, is used as a  |  |
| 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]. Jamialahmadi K, et al. Protective effects of glucosamine hydrochloride against free radical-induced erythrocytes damage. Environ Toxicol Pharmacol. 2014 Jul;38(1):212-9.; Jo JR, et al. Short-term treatment with glucosamine hydrochloride specifically downre

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

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