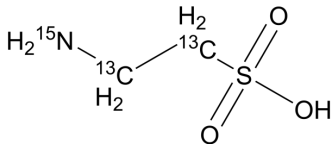
Taurine-$^{13}C_2$,^{15}N

Cat. No.:	HY-B0351S2
CAS No.:	2483830-42-6
Molecular Formula:	$^{13}C_2H_7{}^{15}NO_3S$
Molecular Weight:	128.13
Target:	Autophagy; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Autophagy; Metabolic Enzyme/Protease; Others
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	Taurine-$^{13}C_2$,^{15}N is the ^{13}C- and ^{15}N- labeled Taurine. Taurine, a sulphur-containing amino acid and an organic osmolyte involved in cell volume regulation, provides a substrate for the formation of bile salts, and plays a role in the modulation of intracellular free calcium concentration. Taurine has the ability to activate autophagy in adipocytes[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;53(2):211-216.

[2]. Ripps H, Shen W. Review: taurine: a "very essential" amino acid. Mol Vis. 2012;18:2673-2686.

[3]. Xu YJ, et al. The potential health benefits of taurine in cardiovascular disease. Exp Clin Cardiol. 2008;13(2):57-65.

[4]. Kaneko H, et al. Taurine is an amino acid with the ability to activate autophagy in adipocytes. Amino Acids. 2018;50(5):527-535.

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