Product Data Sheet

Isobutyryl-L-carnitine-d3 chloride

Cat. No.: HY-113165AS Molecular Formula: $C_{11}H_{19}D_3CINO_4$

Molecular Weight: 270.77

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Isobutyryl-L-carnitine-d3 chloride is the deuterium labeled Isobutyryl-L-carnitine chloride. Isobutyryl-L-carnitine chloride is a product of the acyl-CoA dehydrogenases $^{[1]}$.
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]. Cao C, et, al. Metabonomic analysis of toxic action of long-term low-level exposure to acrylamide in rat serum. Hum Exp Toxicol. 2018 Dec; 37(12): 1282-1292.

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

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