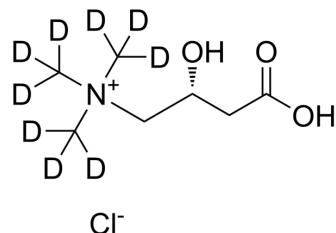


L-Carnitine-d9 chloride

Cat. No.:	HY-B2246S
CAS No.:	2687961-04-0
Molecular Formula:	C ₇ H ₇ D ₉ ClNO ₃
Molecular Weight:	206.72
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	L-Carnitine-d9 chloride is the deuterium labeled L-Carnitine chloride. L-Carnitine chloride, a highly polar, small zwitterion, is an essential co-factor for the mitochondrial β -oxidation pathway. L-Carnitine chloride functions to transport long chain fatty acyl-CoAs into the mitochondria for degradation by β -oxidation. L-Carnitine chloride is an antioxidant. L-Carnitine chloride can ameliorate metabolic imbalances in many inborn errors of metabolism ^{[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.

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

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