L-Carnitine-d_3 hydrochloride

Cat. No.: HY-B1453S

CAS No.: 350818-62-1

Molecular Formula: $C_7H_{13}D_3ClNO_3$

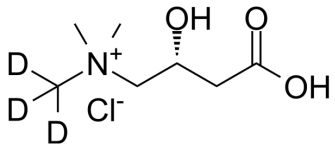
Molecular Weight: 200.68

Target: Reactive Oxygen Species; Isotope-Labeled Compounds

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Others

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H2O : 250 mg/mL (1245.76 mM; Need ultrasonic)

H_2O : 250 mg/mL (1245.76 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	4.9831 mL	24.9153 mL	49.8306 mL
5 mM	0.9966 mL	4.9831 mL	9.9661 mL
10 mM	0.4983 mL	2.4915 mL	4.9831 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (498.31 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

L-Carnitine-d_3 (hydrochloride) is the deuterium labeled L-Carnitine hydrochloride[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.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA