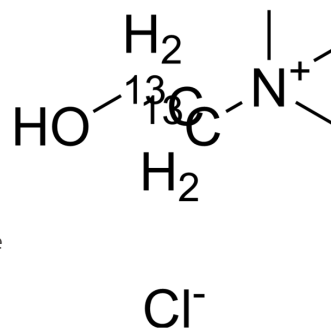


Choline-¹³C₂ chloride

Cat. No.:	HY-B1337S5
CAS No.:	202190-49-6
Molecular Formula:	C ₃ ¹³ C ₂ H ₁₄ ClNO
Molecular Weight:	141.61
Target:	nAChR; Endogenous Metabolite
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Choline- ¹³ C ₂ (chloride) is the ¹³ C labeled Choline chloride[1]. Choline chloride is an essential nutrient that activates alpha7 nicotinic receptors and has analgesic and anti-inflammatory activity. Glycerophosphoinositol choline can affect diseases such as liver disease, atherosclerosis and neurological disorders[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 Feb;53(2):211-216.
- [2]. M Q Holmes-McNary, et al. Apoptosis is induced by choline deficiency in fetal brain and in PC12 cells. *Brain Res Dev Brain Res*. 1997 Jul 18;101(1-2):9-16.
- [3]. T J Rowley, et al. Antinociceptive and anti-inflammatory effects of choline in a mouse model of postoperative pain. *Br J Anaesth*. 2010 Aug;105(2):201-7.

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

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