

## **Product** Data Sheet

## sn-Glycero-3-phosphocholine-d9

 Cat. No.:
 HY-17552S

 CAS No.:
 2260669-07-4

 Molecular Formula:
 C<sub>8</sub>H<sub>11</sub>D<sub>9</sub>NO<sub>6</sub>P

Molecular Weight: 266.28

Target: Cholinesterase (ChE); Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Neuronal Signaling; Metabolic Enzyme/Protease; Others

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

Analysis.

$$\begin{array}{c|c} D & D & O & O \\ D & N^+ & O & P \\ D & D & O \\ \end{array} \\ \begin{array}{c} O & O \\ P & O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\ O \\ \end{array} \\ \begin{array}{c} O \\ P \\$$

## **BIOLOGICAL ACTIVITY**

Description	sn-Glycero-3-phosphocholine-d <sub>9</sub> is the deuterium labeled sn-Glycero-3-phosphocholine. sn-Glycero-3-phosphocholine (Choline Alfoscerate) is a precursor in the biosynthesis of brain phospholipids and increases the bioavailability of choline in nervous tissue. sn-Glycero-3-phosphocholine (Choline Alfoscerate) has significant effects on cognitive function with a good safety profile and tolerability, and is effective in the treatment of Alzheimer's disease and dementia[1][2].
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 <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Traini E, et al. Choline alphoscerate (alpha-glyceryl-phosphoryl-choline) an old choline- containing phospholipidwith a still interesting profile as cognition enhancing agent. Curr Alzheimer Res. 2013 Dec;10(10):1070-9.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[3]. Lee SH, et al. Late treatment with choline alfoscerate (l-alpha glycerylphosphorylcholine, α-GPC) increases hippocampal neurogenesis and provides protection against seizure-induced neuronal death and cognitive impairment. Brain Res. 2017 Jan 1;1654(Pt A):66-76.

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