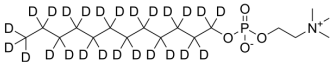
Dodecylphosphocholine-d_{25}

Cat. No.:	HY-116013S1
CAS No.:	861924-55-2
Molecular Formula:	$C_{17}H_{13}D_{25}NO_4P$
Molecular Weight:	376.62
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dodecylphosphocholine-d_{25} is the deuterium labeled Dodecylphosphocholine[1]. Dodecylphosphocholine is a detergent widely utilized in NMR studies of membrane proteins[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]. de Haas GH, Dijkman R, Ransac S, Verger R. Competitive inhibition of lipolytic enzymes. IV. Structural details of acylamino phospholipid analogues important for the potent inhibitory effects on pancreatic phospholipase A2. Biochim Biophys Acta. 1990;1046(3):249-257.

[3]. François Dehez, et al. Mitochondrial ADP/ATP Carrier in Dodecylphosphocholine Binds Cardiolipins with Non-native Affinity. Biophys J. 2017 Dec 5113(11):2311-2315.

[4]. Sarah D Cady, et al. Specific binding of adamantane drugs and direction of their polar amines in the pore of the influenza M2 transmembrane domain in lipid bilayers and dodecylphosphocholine micelles determined by NMR spectroscopy. J Am Chem Soc. 2011 Mar 30133(12):4274-84.

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