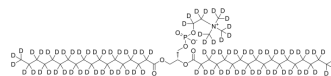


1,2-Distearoyl-sn-glycero-3-phosphorylcholine-d₈₃

Cat. No.:	HY-W040193S3
CAS No.:	326495-40-3
Molecular Formula:	C ₄₄ H ₅ D ₈₃ NO ₈ P
Molecular Weight:	873.66
Target:	Isotope-Labeled Compounds; Liposome
Pathway:	Others; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	1,2-Distearoyl-sn-glycero-3-phosphorylcholine-d ₈₃ is deuterium labeled 1,2-Distearoyl-sn-glycero-3-phosphorylcholine. 1,2-Distearoyl-sn-glycero-3-phosphorylcholine (1,2-Distearoyl-sn-glycero-3-PC; DSPC) is a cylindrical-shaped lipid. 1,2-Distearoyl-sn-glycero-3-phosphorylcholine is used to synthesize liposomes, and is the lipid component in the lipid nanoparticle (LNP) system[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 ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Andrew D Miller. Delivery of RNAi therapeutics: work in progress. *Expert Rev Med Devices*. 2013 Nov;10(6):781-811.
- [2]. Jayesh A Kulkarni, et al. On the role of helper lipids in lipid nanoparticle formulations of siRNA. *Nanoscale*. 2019 Nov 21;11(45):21733-21739.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-223.

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