DPPC-d_{62}

Cat. No.: HY-109506S

CAS No.: 25582-63-2

Molecular Formula: $C_{40}H_{18}D_{62}NO_8P$

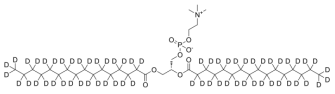
Molecular Weight: 796.42

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 30 mg/mL (37.67 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.2556 mL	6.2781 mL	12.5562 mL
	5 mM	0.2511 mL	1.2556 mL	2.5112 mL
	10 mM	0.1256 mL	0.6278 mL	1.2556 mL

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

BIOLOGICAL ACTIVITY

Description

DPPC-d_{62} is the deuterium labeled DPPC. DPPC (129Y83) is a zwitterionic phosphoglyceride that can be used for the preparation of liposomal monolayers[1]. DPPC-liposome serves effectively as a delivery vehicle for inducing immune responses against GSL antigen in mice[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[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.

[2]. Miller AD. Delivery of RNAi therapeutics: work in progress. Expert Rev Med Devices. 2013 Nov;10(6):781-811.

[3]. Akiko Uemura, et al. Induction of immune responses against glycosphingolipid antigens: comparison of antibody responses in mice immunized with antigen associated with liposomes prepared from various phospholipids. J Vet Med Sci. 2005 Dec;67(12):1197-201.

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