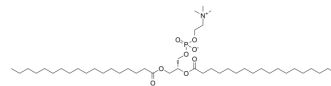


1,2-Distearoyl-sn-glycero-3-phosphorylcholine

Cat. No.:	HY-W040193		
CAS No.:	816-94-4		
Molecular Formula:	C ₄₄ H ₈₈ NO ₈ P		
Molecular Weight:	790.15		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 50 mg/mL (63.28 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.2656 mL	6.3279 mL	12.6558 mL
	5 mM	0.2531 mL	1.2656 mL	2.5312 mL
	10 mM	0.1266 mL	0.6328 mL	1.2656 mL

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

BIOLOGICAL ACTIVITY

Description

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

In empty lipid nanoparticle (LNP) systems that do not contain siRNA, DSPC-cholesterol resides in outer layers, whereas in loaded systems a portion of the DSPC-cholesterol is internalised together with siRNA^[2].
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.

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

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