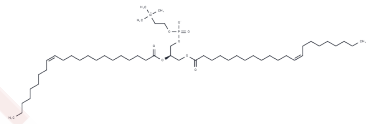
Data Sheet (Cat.No.T37623)

TargetMol

1,2-Dierucoyl-sn-glycero-3-PC

Chemical Properties



CAS No. : 51779-95-4

Formula: C52H100NO8P

Molecular Weight: 898.33

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	1,2-Dierucoyl-sn-glycero-3-PC (DEPC) is a component of phospholipids and liposome membranes, used for liposome preparation and studying lipid bilayers.
Targets(IC50)	Liposome
In vitro	In an external-ring gas-riser bubble column, glucose oxidase (GO) was encapsulated in phosphatidylcholine vesicles (PC liposomes). Due to gas-liquid flow-induced membrane permeability to glucose, GO in 1,2-Dierucoyl-sn-glycero-3-PC (DEPC)-treated liposomes exhibited the highest oxidative activity [4].

Solubility Information

Solubility	Ethanol: 15 mg/mL (16.7 mM),Sonication is recommended. DMSO: 4 mg/mL (4.45 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1132 mL	5.5659 mL	11.1318 mL
5 mM	0.2226 mL	1.1132 mL	2.2264 mL
10 mM	0.1113 mL	0.5566 mL	1.1132 mL
50 mM	0.0223 mL	0.1113 mL	0.2226 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Mathai JC, et al. Structural determinants of water permeability through the lipid membrane. J Gen Physiol. 2008; 131(1):69-76.
Bolivar JH, et al. Interaction of lipids with the neurotensin receptor 1. Biochim Biophys Acta. 2016;1858(6):1278-1287.
Scollo F, et al. Phospholipids Critical Micellar Concentrations Trigger Different Mechanisms of Intrinsically Disordered Proteins Interaction with Model Membranes. J Phys Chem Lett. 2018;9(17):5125-5129.
Masahiro INOUE, et al. Oxidation of Glucose in Gas-Liquid Flow Catalyzed by Glucose Oxidase-Containing Liposomes with Different Acyl Chain Properties. Journal of chemical engineering of japan. Published online, 2013.

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