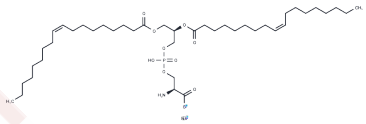
Data Sheet (Cat.No.T35606)

TargetMol

1,2-Dioleoyl-sn-glycero-3-phospho-L-serine sodium

Chemical Properties



CAS No. : 90693-88-2

Formula: C42H77NNaO10P

Molecular Weight: 810.04

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-Dioleoyl-sn-glycero-3-phospho-L-serine sodium (1,2-Dioleoyl-sn-glycero-3-PS (sodium salt)) can be used in lipid mixtures with DOPC and DOPE as effective nontoxic and nonviral DNA vectors. It has been utilized in the formation of unilamellar vesicles to study membrane structure curvature and in supported lipid bilayers to examine the impact of various support materials on lipid redistribution between membrane leaflets.
Targets(IC50)	Lipid,Liposome

Solubility Information

Solubility	Ethanol: 1.8 mg/mL (2.22 mM),when pH is adjusted to 3 with HCl. Sonication and heating to 60°C are recommended. Chloroform: 10 mg/mL (12.35 mM),Sonication is recommended. DMSO: 6.25 mg/mL (7.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2345 mL	6.1725 mL	12.3451 mL
5 mM	0.2469 mL	1.2345 mL	2.469 mL
10 mM	0.1235 mL	0.6173 mL	1.2345 mL
50 mM	0.0247 mL	0.1235 mL	0.2469 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

Abu-Baker S, et al. Cytotoxicity and Selectivity in Skin Cancer by SapC-DOPS Nanovesicles. J Cancer Ther. 2012 Aug; 3(4):321-326.

Kucerka N, et al. Curvature effect on the structure of phospholipid bilayers. Langmuir. 2007 Jan 30;23(3):1292-9.

Richter RP, Maury N, Brisson AR. On the effect of the solid support on the interleaflet distribution of lipids in supported lipid bilayers. Langmuir. 2005 Jan 4;21(1):299-304.

Barrán-Berdón AL, et, al. Langmuir. Ca(2+)-mediated anionic lipid-plasmid DNA lipoplexes. Electrochemical, structural, and biochemical studies. 2014 Oct 7;30(39):11704-13.