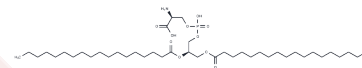


DSPS

Chemical Properties

CAS No. : 51446-62-9
Formula: C42H82NO10P
Molecular Weight: 792.08
Storage: 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	DSPS (Di-Octadecanoylphosphatidylserine) is a glycerophospholipid, an important phospholipid membrane component that plays a key role in cell cycle signaling. DSPS can regulate cellular activity and mediate apoptosis. DSPS is widely used as a nutritional supplement.
Targets(IC50)	Others,Liposome
In vitro	METHODS: Macrophages RAW264.7 were treated with LNP (10-50 μ M) containing DSPS (0%-95%) for 24 h. Bodipy FL positive cells were detected using Flow Cytometry. RESULTS: In the absence of DSPS, 10 μ M of LNP transfected only about 27% of the cells. The percentage of Bodipy FL positive cells increased to 66%, 76%, 82% and 85% when LNP contained 20%, 45%, 60% and 95% DSPS, respectively. [1]

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble) Ethanol: < 0.5 mg/mL (insoluble) DMSO: 0.99 mg/mL (1.25 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2625 mL	6.3125 mL	12.625 mL
5 mM	0.2525 mL	1.2625 mL	2.525 mL
10 mM	0.1262 mL	0.6312 mL	1.2625 mL
50 mM	0.0252 mL	0.1262 mL	0.2525 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

Bressy C, et al. Inhibition of c-Rel expression in myeloid and lymphoid cells with distearoyl -phosphatidylserine (DSPS) liposomal nanoparticles encapsulating therapeutic siRNA. *PLoS One*. 2022 Dec 15;17(12):e0276905.

Martin KR, Kantari-Mimoun C, Yin M, Pederzoli-Ribeil M, Angelot-Delettre F, Ceroi A, Grauffel C, Benhamou M, Reuter N, Saas P, Frachet P, Boulanger CM, Witko-Sarsat V. Proteinase 3 is a phosphatidylserine binding protein which affects the production and function of microvesicles. *J Biol Chem*. 2016 Mar 9. pii: jbc.M115.698639. [Epub ahead of print] PubMed PMID: 26961880.

Majumder R, Koklic T, Rezaie AR, Lentz BR. Correction to Phosphatidylserine-Induced Factor Xa Dimerization and Binding to Factor Va Are Competing Processes in Solution. *Biochemistry*. 2016 Mar 15;55(10):1554. doi: 10.1021/acs.biochem.6b00112. Epub 2016 Mar 4. PubMed PMID: 26943353.

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