Data Sheet (Cat.No.T35577)

TargetMol

Phosphatidylserine

Chemical Properties

CAS No. :	1446756-47-3
Formula:	C42H78NO10P (for oleoyl)
Molecular Weight:	788.1
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	Phosphatidylserine is a phospholipid naturally present in mammals, exhibiting anti-inflammatory and anti-atherosclerotic effects. It activates PKC, neutral sphingolipidase, C-raf-1 protein kinase, and other cofactors involved in multiple signaling pathway activations.
Targets(IC50)	Immunology/Inflammation related,PKC
In vitro	Phosphatidylserine suppresses inflammation in tissues by inducing TGF-β secretion, thereby avoiding immune response activation through regulatory T cell production [4]. MS049 (0.1-10 μM; 20 h) concentration-dependently reduced H3R2me2a labeling in HEK293 cells [1].
In vivo	Phosphatidylserine (0.5 mg liposome; single dose; subcutaneous injection) forms liposomes with PC and cholesterol in a 30:30:40 molar ratio. These liposomes suppress in vivo immune responses by binding to and enhancing activation of phosphatidylserine receptors [4].

Solubility Information

Solubility	Chloroform: Soluble,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2689 mL	6.3444 mL	12.6887 mL
5 mM	0.2538 mL	1.2689 mL	2.5377 mL
10 mM	0.1269 mL	0.6344 mL	1.2689 mL
50 mM	0.0254 mL	0.1269 mL	0.2538 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

Vance JE. Phosphatidylserine and phosphatidylethanolamine in mammalian cells: two metabolically related aminophospholipids. J Lipid Res. 2008;49(7):1377-1387.
Darabi M, Kontush A. Phosphatidylserine in atherosclerosis. Curr Opin Lipidol. 2016;27(4):414-420.
Segawa K, et al. An Apoptotic 'Eat Me' Signal: Phosphatidylserine Exposure. Trends Cell Biol. 2015;25(11):639-650.
Hoffmann PR, et al. Interaction between phosphatidylserine and the phosphatidylserine receptor inhibits immune responses in vivo. J Immunol. 2005;174(3):1393-1404.