Tel: 1(800)388-4221 Fax: 1(917)591-2212 Email: info@nanocs.com

TECHNICAL DATA SHEET

mPEG Phosphoserine, MW 1000, 2000, 5000, 10k, 20k

Catalog Numbers: PG1-PS-1k, 2k, 5k, 10k, 20k. Synonym: Methoxy PEG Phosphatidyl-L-Serine, mPEG DPPS

Description:

mPEG Phosphatidyl-L-Serine is one of Nanocs' monofunctional phospholipid PEG derivatives. DPPS (1,2-dipalmitoyl-sn-glycero-3-phosphoserine) is a 16 C phospholipid that is highly hydrophobic. PEG backbone, on the other hand, offers good hydrophilicity. Pegylated phosphoserine are soluble both in organic and aqueous solution. Phospholipids PEGs are excellent liposome formulation materials that can be used for drug modification, gene transfection and vaccine delivery. Pegylation of phospholipids significantly improves the blood circulation time and stability for encapsulated drugs. These materials can also be used for targeted drug delivery by modifying their surfaces with targeting ligands such as antibodies, peptides.

Product Structure:

$$\mathsf{CH_{3}O-(OCH_{2}CH_{2})n-CH_{2}CH_{2}}\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}}{\overset{\mathsf{O}}}{\overset{\mathsf{O}}}$$

Product Specifications:

Composition: mPEG Phosphoserine.Appearance: White to off white solid.

Solubility: 10 mg/mL, clear in warm water, chloroform.

Stability: ~12 months at -20 °C.

Handling and Use:

For best use, **mPEG Phosphoserine** should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For more information about using this product, visit **www.nanocs.net.**

Storage Conditions:

Phosphoserine PEG should be stored at -20 °C. Desiccate.

This product is for research use only and is not intended for use in humans or for diagnostic use.

The information given in this document is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user's responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.