

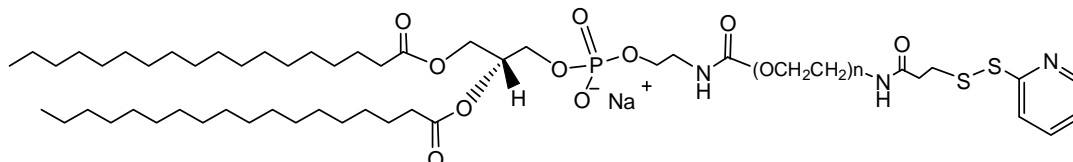
TECHNICAL DATA SHEET
DSPE PEG PDP, MW 1000, 2000, 3400, 5000, 10k, 20k

Catalog Numbers: PG2-DSPD-1k, 2k, 3k, 5k, 10k, 20k.

Synonym: DSPE PEG OPSS, OPSS PEG DSPE, PDP PEG DSPE

Description:

DSPE PEG PDP is one of Nanocs' reactive phospholipid PEG derivatives that can react with free thiol groups. **DSPE** (1,2-distearoyl-sn-glycero-3-phosphoethanolamine) is an 18 carbon phospholipid that is highly hydrophobic. PEG backbone, on the other hand, offers good hydrophilicity and water solubility. PDP (pyridyldisulfide) functionalized DSPE PEG is able to react with free thiol groups to form a disulfide bond which can be cleaved by DTT or other disulfide reducing reagents. Reaction between PDP and thiol allows the attachment of DSPE PEG to thiol bearing molecules or particles with high efficiency. Nanocs has developed a variety of multifunctional phospholipid PEG products which have been used for targeted drug delivery, nanoparticle functionalization and liposome formulation. Pegylated phospholipid products demonstrate excellent amphiphilic properties and offer superior advantages for small and large molecule modification and targeted delivery. Pegylation of phospholipids significantly improves the blood circulation time and stability for encapsulated drugs; it also suppresses the non-specific binding of charged molecules to the modified surfaces.

Product Structure:

Product Specifications:

- Composition: **DSPE PEG PDP.**
- Appearance: White to off-white solid.
- Solubility: >10 mg/mL clear in warm water, chloroform, DMSO
- Reactive group: PDP (Pyridyldisulfide).
- Reactive to: Sulfhydryl group (-SH).

Handling and Use:

For best use, **DSPE PEG PDP** 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:

PDP PEG DSPE should be stored at -20 °C. Desiccate. Protect from light. Re-test material after 6 months.

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

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