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TECHNICAL DATA SHEET

DMPE PEG NHS, MW 1000, 2000, 3400, 5000, 10k, 20k

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

Synonym: NHS PEG DMPE

Description:

DMPE PEG NHS is one of Nanocs' reactive phospholipid PEG derivatives that can react with primary amine groups. DMPE (1,2-dimyristoyl-sn-glycero-3-phosphoethanolamine) is a 14 carbon phospholipid that is highly hydrophobic. PEG backbone, on the other hand, offers good hydrophilicity and water solubility. **NHS** functionalized DMPE PEG has excellent reactivity towards primary amine groups. Reaction between NHS and amine group allows the attachment of DMPE PEG to various substrates with high efficiency. This reaction proceeds easily at alkaline pH. **NHS PEG DMPE** is one of most commonly used reactive phospholipids to conjugate antibodies, peptides or other ligands to the surface of liposome and other lipid PEG nanoparticles. Pegylated phospholipids show significantly longer blood circulation time and higher stability. Nanocs has developed a comprehensive collection of reactive phospholipid PEG products that have high purity, various molecular weights and excellent chemical reactivity. These lipid PEG conjugates demonstrate excellent amphilphilic properties and offer superior advantages for small and large molecule labeling, formulation and delivery.

Product Structure:

$$C_{13}H_{27} - C - O - O - C - C_{13}H_{27}$$

$$O - C - C_{13}H_{27}$$

Product Specifications:

Composition: DMPE PEG NHS.

Appearance: White to off white solid.

Solubility: >10 mg/mL in hot water, chloroform.

Reactive group: NHS.

Reactive to: Primary amine (-NH₂).

Handling and Use:

DMPE PEG NHS 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:

DMPE PEG NHS should be stored at -20 °C. Desiccate. Re-test material after 6 months.

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

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