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#### **TECHNICAL DATA SHEET**

# DOPE PEG Maleimide, MW 2000, 3400, 5000, 10k, 20k

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

Synonym: Maleimide PEG DOPE

### **Description:**

**DOPE PEG Maleimide** is one of Nanocs' reactive phospholipid PEG derivatives that can react with free sulfhydryl groups. DOPE (1,2-dioleoyl-sn-glycero-3-phosphoethanolamine) is an 18 carbon un-saturated phospholipid with high hydrophobicity. PEG backbone, on the other hand, offers good hydrophilicity. Maleimide group react readily with thiol groups at pH 6.5~7.5 to form a stable thio-ether bond. Reaction between maleimide and thiol allows attachment of DOPE to various thiol bearing substrates with high efficiency and specificity. PEG linker bridged DOPE and maleimide group offers good water solubility, flexible linker structure and enhanced stability. Maleimide functionalized DOPE PEG can be used to modify proteins, antibodies or particles. Pegylated phospholipids show significantly improved blood circulation time and enhanced stability.

## **Product Structure:**

### **Product Specifications:**

Composition: DOPE PEG Maleimide.

Appearance: White to off white solid.

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

Reactive group: Maleimide.

Reactive to: Sulfhydryl/thiol.

### Handling and Use:

For best use, **DOPE PEG Maleimide** 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:**

Maleimide PEG DOPE should be stored at -20 °C. Desiccate. Protect from light. 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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