

DSPE-PEG-NH2

Catalog: Lipo-509

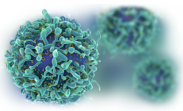
1,2-Distearoyl-sn-Glycero-3-Phosphoethanolamine (DSPE)-polyethylene glycol-amine (DSPE-PEG-Amine, DSPE-PEG-NH2) is a linear heterobifunctional PEGylation reagent with a DSPE phospholipid and an amine. DSPE-PEG-NH2 is used to modify liposome surface with biomolecules containing amine reactive groups (NHS, thiolate). It is a useful self-assembling reagent to prepare grafted or PEGylated liposome or micelle while also providing an amine group for bioconjugation. It is often used in targeted drug delivery with the lipid bilayer to improve drug solubility, the PEG to provide stealth property, extend circulation half-life and reduce non-specific protein binding or cell adhesion, and the amine group to bioconjugate targeting molecules including antibody, aptamer, protein, and peptide.

PRODUCT INFORMATION

Product Name	DSPE-PEG-NH2
Catalog Number	Lipo-509
Product Overview	1,2-Distearoyl-sn-Glycero-3-Phosphoethanolamine (DSPE)-polyethylene glycol-amine (DSPE-PEG-Amine, DSPE-PEG-NH2) is a linear heterobifunctional PEGylation reagent with a DSPE phospholipid and an amine. DSPE-PEG-NH2 is used to modify liposome surface with biomolecules containing amine reactive groups (NHS, thiolate). It is a useful self-assembling reagent to prepare grafted or PEGylated liposome or micelle while also providing an amine group for bioconjugation. It is often used in targeted drug delivery with the lipid bilayer to improve drug solubility, the PEG to provide stealth property, extend circulation half-life and reduce non-specific protein binding or cell adhesion, and the amine group to bioconjugate targeting molecules including antibody, aptamer, protein, and peptide.
Purity	>95%
Application	Liposome production; Synthetic lipid

45-1 Ramsey Road, Shirley, NY 11967, USA
info@creative-biostructure.com | Tel: 1-631-317-1417 | Fax: 1-631-207-8356

© Creative Biostructure. All Rights Reserved.



Storage	Store at -20 °C
Synonyms	1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[amino(polyethylene glycol)] (DSPE-PEG-NH2)

USAGE GUIDELINES

General Handling	Avoid excessive mixing or vortexing to prevent aggregation. Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use.
Storage	**Short term:** +2°C to +8°C (up to 1 week) **Long term:** -80°C (stable for 12 months)
Stability	Stable for 12 months at -80°C. Avoid repeated freeze-thaw cycles.
Freeze / Thaw	Can be frozen, but limit to ?3 freeze/thaw cycles to maintain particle integrity.

Important: This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.

45-1 Ramsey Road, Shirley, NY 11967, USA
info@creative-biostructure.com | Tel: 1-631-317-1417 | Fax: 1-631-207-8356

© Creative Biostructure. All Rights Reserved.