



DSPE-PEG-DBCO

Catalog: Lipo-521

PRODUCT INFORMATION

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| Name | DSPE-PEG-DBCO |
| Cat No. | Lipo-521 |
| Product Overview | 1,2-Distearoyl-sn-Glycero-3-Phosphoethanolamine (DSPE) conjugated polyethylene glycol with dibenzocyclooctyne (DSPE-PEG-DBCO) is a linear heterobifunctional PEGylation reagent with a DSPE phospholipid and an DBCO for Cu-free chemistry. DSPE derivatives can go Click Chemistry reaction without a need of any metal catalysts. The strain-promoted 1,3-dipolar cycloaddition of cyclooctynes and azides, also termed as the Cu-free click reaction, is a bioorthogonal reaction that enables the conjugation of two molecules in aqueous solution. DBCO reagents can be used to label azide-modified biomolecules spontaneous without the need for toxic Cu catalysts. The reaction of azides with strained alkynes, such as cyclooctynes, readily forms a triazole product without the need for a toxic catalyst. PEGylation can increase solubility and stability and reduce immunogenicity of peptides and proteins. It can also suppress the non-specific binding of charged molecules to the modified surfaces. |
| Purity | >95% |
| Application | Liposome production; Synthetic lipid |
| Synonyms | 1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-poly(ethylene glycol)-dibenzocyclooctyne |