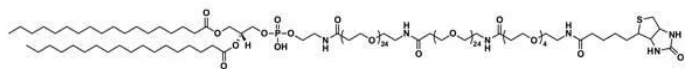


# BIOTIN-DPEG® 4-AMIDO-DPEG® 24-AMIDO-DPEG® 24-DSPE

SKU: QBD-11386



Biotin-dPEG® 4-amido-dPEG® 24-amido-dPEG® 24-DSPE, product number QBD-11386, permits biotin labeling of liposomes and micelles by attaching a biotin label to the lipid 1,2-Distearoyl-SN-glycero-3-phosphoethanolamine (DSPE) through a very long (169 atoms, 186.3 Å) single molecular weight, discrete chain length PEG (dPEG®) spacer. The dPEG® spacer has a mass comparable to the polymer PEG2000 commonly used in liposomes and micelles, but unlike polymer PEG, which consists of a diverse and intractable mixture of PEG chain lengths and molecular weights, the dPEG® spacer is a high-purity, single molecule product. The non-immunogenic dPEG® spacer increases the hydrodynamic volume of the molecule, improving its water solubility. In liposomes and micelles, the conjugate's increased hydrodynamic volume may help hide the carrier construct from the immune system and prevent opsonization.

The biotin label of QBD-11386, biotin-dPEG® 4-amido-dPEG® 24-amido-dPEG® 24-DSPE can be used in therapeutic antibody pretargeting to improve radioimmunotherapy in liposomal and micellar carriers and reduce off-target effects. In addition, the product can be mixed with other DSPE products from Quanta BioDesign with different reactive, protective, or functional groups.

## Specifications

<b>Unit Size</b>	25 mg, 100 mg
<b>Molecular Weight</b>	3478.328; single compound
<b>Chemical formula</b>	C <sub>164</sub> H <sub>319</sub> N <sub>6</sub> O <sub>65</sub> PS
<b>CAS</b>	N/A
<b>Purity</b>	> 97%
<b>Spacers</b>	dPEG® Spacer is 169 atoms and 186.3 Å
<b>Shipping</b>	Ambient
<b>Typical solubility properties (for additional information contact Customer Support)</b>	Methylene Chloride, Acetonitrile, DMSO, DMF, or Chloroform

**For research use only. Not intended for animal or human therapeutic or diagnostic use.**

**Storage and handling**

-20°C; Always let come to room temperature before opening; be careful to limit exposure to moisture and restore under an inert atmosphere; stock solutions can be prepared with dry solvent and kept for several days (freeze when not in use). dPEG® pegylation compounds are generally hygroscopic and should be treated as such. This will be less noticeable with liquids, but the solids will become tacky and difficult to manipulate, if care is not taken to minimize air exposure.

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