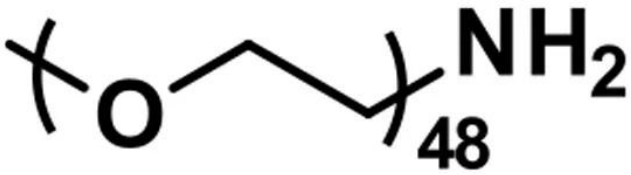
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M-DPEG®$_{48}$-AMINE

SKU: QBD-10918



DESCRIPTION

m-dPEG®$_{48}$-amine, product number QBD-10918, is a non-immunogenic, water-soluble chemical modification reagent. The product contains a single molecular weight, discrete-length polyethylene glycol (dPEG®) chain terminated on one end with a methyl group and on the other end with a reactive primary amine. The linker length is 146 atoms (173.1 Å). The amino group reacts with carboxylic acids (and their active esters), aldehydes, and ketones. Reacting the amino group with aldehydes or ketones forms a labile imine (Schiff base) that can be reduced to a secondary amine under mild conditions to provide greater stability to the conjugate. Reacting carboxylic acids or their active esters with m-dPEG®48-amine forms stable amide bonds. Uses for this product include passivating surfaces and coating biomolecules.

Biomolecules modified with m-dPEG®$_{48}$-amine display enhanced water solubility, increased hydrodynamic volume, and reduced immunogenicity. This product reacts quickly with active esters of carboxylic acids (for example, NHS esters and TFP esters) to form amide bonds. Also, it forms amide bonds directly with carboxylic acids using the carbodiimide EDC.

m-dPEG®$_{48}$-amine has been cited in the scientific literature and is potentially useful in numerous applications. Such applications include the following:
Passivating nanoparticle surfaces, including the surfaces of carbon nanotubes and graphene oxide;
Creating a non-immunogenic “stealth” coating for liposomes and micelles;

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Increasing the hydrodynamic volume of small molecules, including peptides and antibody fragments; and,
Increasing the water solubility of hydrophobic molecules.

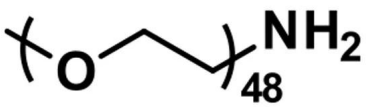
SPECIFICATIONS

CAS Number	32130-27-1
Molecular Weight	2145.58; single compound
Chemical Formula	$C_{97}H_{197}NO_{48}$
Purity	> 97%
Unit Size	100mg, 1000mg
Solubility	Methylene chloride, Acetonitrile, DMAC, DMSO or water.
Spacers	dPEG® Spacer is 146 atoms and 173.1 Å
Storage Instructions	-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.
Shipping Instructions	Ambient

DOCUMENTS

- Safety Data Sheet
- Datasheet

GALLERY IMAGES



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