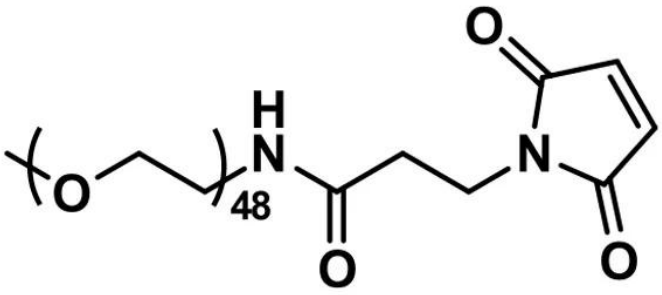
www.vectorlabs.com
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M-DPEG®$_{48}$-MAL

SKU: QBD-10932



DESCRIPTION

m-dPEG®48-MAL, product number QBD-10932, is a sulfhydryl-reactive, single molecular weight, with a long (152 atoms, 178.6 Å), discrete-chain-length PEG (dPEG®). This product modifies surfaces and biomolecules with free thiol groups through the maleimide reactive group. The non-immunogenic, methyl-terminated dPEG® chain has no charge but adds water solubility and hydrodynamic volume to molecules to which it is conjugated.

The reaction of the maleimide end of m-dPEG®48-MAL, product number QBD-10932, with a sulfhydryl proceeds best at pH 6.5 – 7.5. Conduct the conjugation at the lowest reasonable pH within this range. Above pH 7.5, free amines compete with free thiols at the maleimide reaction site, which creates confusing results. Moreover, at higher pH values, the maleimide ring may open to form unreactive maleamic acid.

Possible uses for m-dPEG®48-MAL include the following:
Surface coating and passivation of thiolated nanoparticles;
Modification of cysteine residues on peptides, proteins, and other sulfhydryl-containing molecules to increase hydrophilicity and decrease immunogenicity;
Modification of cysteine residues on peptides, proteins, and other sulfhydryl-containing molecules to increase hydrodynamic volume and reduce or eliminate renal clearance of the modified compound;
Supramolecular construction (for example, of hydrogels); and,

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

As a probe of protein structure or enzymatic function.

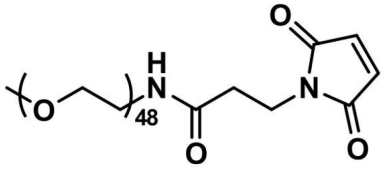
SPECIFICATIONS

CAS Number	88504-24-9
Molecular Weight	2296.70; single compound
Chemical Formula	$C_{104}H_{202}N_2O_{51}$
Purity	> 98%
Unit Size	100mg, 1000mg
Solubility	Methylene chloride, Acetonitrile, DMAC, DMSO or water.
Spacers	dPEG® Spacer is 152 atoms and 178.6 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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