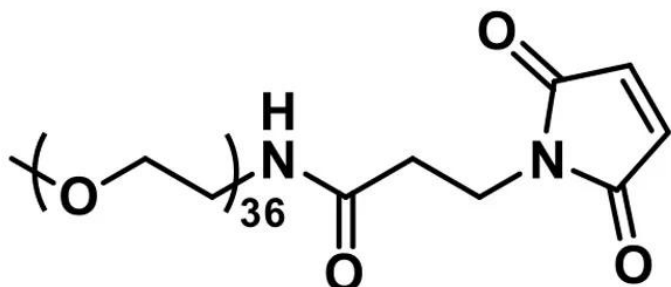


M-DPEG®₃₆-MAL

SKU: QBD-10931



m-dPEG®₃₆-MAL, product number QBD-10931, is a sulfhydryl-reactive, single molecular weight, with a long (116 atoms, 137.2 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®₃₆-MAL, product number QBD-10931, 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®₃₆-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,

As a probe of protein structure or enzymatic function.

Specifications

Unit Size	100mg, 1000mg
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For research use only. Not intended for animal or human therapeutic or diagnostic use.

Molecular Weight	1768.07; single compound
Chemical formula	C ₈₀ H ₁₅₄ N ₂ O ₃₉
CAS	88504-24-9
Purity	> 98%
Spacers	dPEG® Spacer is 116 atoms and 137.2 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene chloride, Acetonitrile, DMAC, DMSO or water.
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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