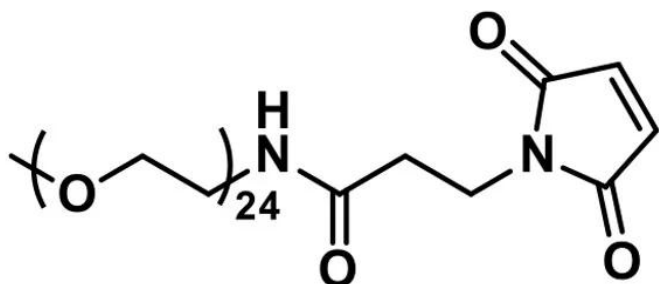


M-DPEG®₂₄-MAL

SKU: QBD-10319



m-dPEG®₂₄-MAL, product number QBD-10319, is a sulfhydryl-reactive, single molecular weight, with a 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®₂₄-MAL, product number QBD-10319, 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.

Published uses for m-dPEG®₂₄-MAL include the following:

modifying surface-accessible free thiols on enzymes to probe enzymatic function;
developing a virus-based drug delivery system; and,
developing probes of cellular redox reactions.

Specifications

Unit Size	100 mg, 1000 mg
Molecular Weight	1239.44; single compound
Chemical formula	C ₅₆ H ₁₀₆ N ₂ O ₂₇
CAS	88504-24-9
Purity	> 98%
Spacers	dPEG® Spacer is 80 atoms and 50.7 Å
Shipping	Ambient

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

**Typical solubility
properties (for
additional information
contact Customer
Support)**

Methylene chloride, Acetonitrile, DMAC or DMSO.

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.

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