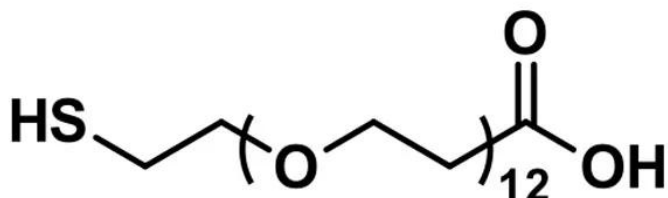


THIOL-DPEG®₁₂-ACID

SKU: QBD-10850



Thiol-dPEG®₁₂-acid, product number QBD-10850, is a single molecular weight, discrete-length polyethylene glycol (dPEG®) PEGylation reagent. One end of the medium-length (39 atoms, 46.8 Å) dPEG® linker terminates in a sulfhydryl (thiol) group, while a propionic acid moiety terminates the opposite end. The thiol end of the molecule forms dative bonds with gold, thioether bonds with maleimide and bromoacetate groups, and disulfide bonds with other sulfhydryl groups. The propionic acid group reacts with amines to form amide bonds. Alternatively, if it is left unreacted, the propionic acid group provides a negative charge to the conjugated molecule or modified surface.

Numerous scientific publications attest to the benefits of Thiol-dPEG®₁₂-acid, including the following applications:

- Assaying protease by using fluorescence quenching with gold nanoparticles;
- Enhancing transfection efficiency;
- Modulating glucose transport with gold nanoparticles;
- Developing multiplexed bioassays on semiconductor gold nanocrystals;
- Developing spectroscopy applications; and,
- Detecting cancer through a FRET-based, NIR-activated system that uses gold nanoparticles.

Specifications

Unit Size	100mg, 1000mg
Molecular Weight	634.77; single compound
Chemical formula	C ₂₇ H ₅₄ O ₁₄ S
CAS	1032347-93-5
Purity	> 97%
Spacers	dPEG® Spacer is 39 atoms and 46.8 Å

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

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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