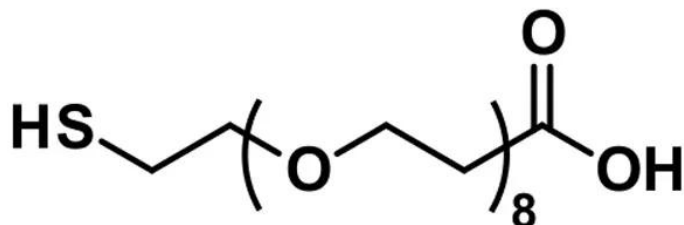


# THIOL-DPEG®<sub>8</sub>-ACID

**SKU:** QBD-10183



"Thiol-dPEG®<sub>8</sub>-acid, product number QBD-10183, is a hydrophilic, flexible compound containing a single molecular weight, discrete-length polyethylene glycol (dPEG®) chain. A sulfhydryl group and a propionic acid group form the linker's two termini. The sulfhydryl moiety reacts with other thiols, maleimido groups, the SPDP reactive group, and bromoacetamido groups, and forms dative bonds with gold and silver. Reactions of Thiol-dPEG®<sub>8</sub>-acid with sulfhydryls or SPDP form disulfide bonds. With maleimido and bromoacetamido compounds, Thiol-dPEG®<sub>8</sub>-acid reacts to form thioether linkages. Gold and silver form dative bonds with the sulfhydryl group on Thiol-dPEG®<sub>8</sub>-acid. The propionic acid moiety couples with free amines to form amide bonds.

This product can be used to modify gold and silver surfaces, crosslink amines and thiols, and thiolate biomolecules. The dPEG®<sub>8</sub> linker imparts water solubility to the conjugate. In published scientific literature, Thiol-dPEG®<sub>8</sub>-acid has

Labeled polyester nanoparticles with 18F;

Functionalized gold nanoparticles with RGD peptides;

Demonstrated proof-of-concept detection of pathogenic biomarkers at nM limits; and,

Functionalized a localized surface plasmon resonance (LSPR) biosensor integrated with a microfluidic chip."

## Specifications

<b>Unit Size</b>	100 mg, 1000 mg
<b>Molecular Weight</b>	458.57; single compound
<b>Chemical formula</b>	C <sub>19</sub> H <sub>38</sub> O <sub>10</sub> S
<b>CAS</b>	866889-02-3
<b>Purity</b>	> 98%

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

<b>Spacers</b>	dPEG® Spacer is 28 atoms and 32.5 Å
<b>Shipping</b>	Ambient
<b>Typical solubility properties (for additional information contact Customer Support)</b>	Methylene chloride, Acetonitrile, DMAC, DMSO or water.
<b>Storage and handling</b>	-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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