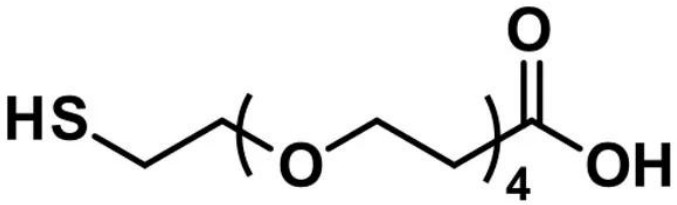
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

THIOL-DPEG®₄-ACID

SKU: QBD-10247



DESCRIPTION

Thiol-dPEG®4-acid, product number QBD-10247, contains a short, monodisperse polyethylene glycol (PEG) linker functionalized with a sulfhydryl group on one end and a propionic acid moiety on the other.The sulfhydryl forms dative bonds with gold and silver and reacts with thiol-reactive functional groups such as maleimide, bromoacetyl, SPDP, and thiol. The carboxylic acid end of the molecule couples to free amines using EDC or any suitable carbodiimide. An acylating agent such as N-hydroxysuccinimide (NHS) or 2,3,5,6-tetrafluorophenol (TFP) can enhance coupling efficiency. The carboxylate must react after the sulfhydryl conjugation.

Thiol-dPEG®4-acid forms dative bonds with gold surfaces and provides a non-immunogenic, hydrophilic spacer between the gold coat and the environment surrounding the gold. The terminal carboxylic acid can be left unmodified, or it can react with amines to crosslink other molecules to the gold.

In published scientific literature, Thiol-dPEG®4-acid in a mixed monolayer has prevented opsonization of gold nanoparticles. Other published uses for this product include coating nanoparticles, coating gold electrodes used in ion channel recording, developing aptamer-based sensors, and developing a chemical detector with nanometer-scale spatial resolution.

SPECIFICATIONS

CAS Number	749247-06-1

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

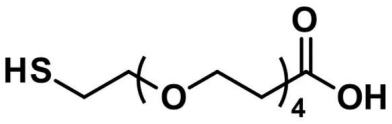
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Molecular Weight	282.35; single compound
Chemical Formula	$C_{11}H_{22}O_6S$
Purity	> 98%
Unit Size	100 mg, 1000 mg
Solubility	Methylene chloride, Acetonitrile, DMAC, DMSO or moderate solubility in water.
Spacers	dPEG® Spacer is 16 atoms and 18.3 Å
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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