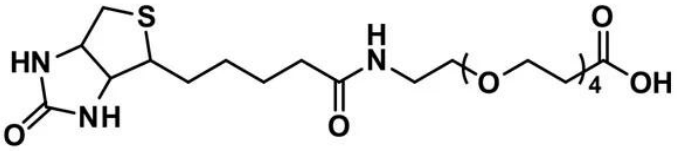
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

DPEG®₄-BIOTIN ACID

SKU: QBD-10199



DESCRIPTION

dPEG®4 biotin acid, product number QBD-10199, is a biotinylation reagent containing a single molecular weight tetraethylene glycol (PEG) spacer containing biotin on one end and a propionic acid moiety on the other. The terminal propionic acid group couples to amines directly using a carbodiimide such as EDC, and it can be functionalized as an N-hydroxysuccinimidyl (NHS) or 2,3,5,6-tetrafluorophenyl (TFP) ester for reaction with amines.

Amphiphilic dPEG®4 biotin acid can be dissolved both in water or aqueous buffer and in organic solvents. When used as a label, it does not cause aggregation or precipitation of biomolecules even when excess label is used. Using 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC) chemistry, QBD-10199 can be coupled directly to free primary amines in aqueous media. These free amines can be on a protein, peptide, or the treated surface of a nanoparticle. The linker length of dPEG®4 biotin acid is slightly longer than hydrophobic LC-biotin and demonstrates superior performance over LC-biotin due to its flexiblity and water solubility.

Product number QBD-10199 is the precursor product of our popular products QBD-10198, NHS-dPEG®4-biotin, and QBD-10008, Biotin-dPEG®4-TFP ester. Many applications use this product to take advantage of the strong avidin-biotin binding interaction. Such applications include single-cell imaging of protein secretion, developing biosensors, isolating specific cell types by separation with magnetic beads, characterizing and understanding the streptavidin-biotin interaction, creating affinity-based probes, and assembling supramolecular nanostructures.

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

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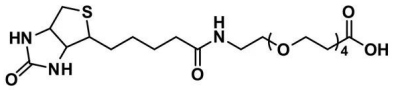
SPECIFICATIONS

CAS Number	721431-18-1
Molecular Weight	491.60; single compound
Chemical Formula	$C_{21}H_{37}N_3O_8S$
Purity	> 98%
Unit Size	100 mg, 1000 mg
Solubility	Methylene chloride, Acetontrile, DMAC, DMSO or water.
Spacers	dPEG® Spacer is 16 atoms and 19.2 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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