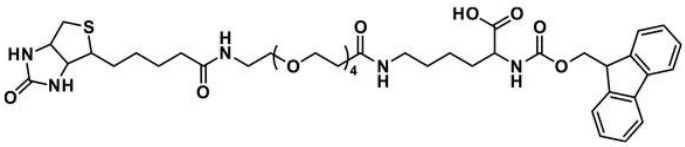
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

FMOC-N-LYS-(DPEG®₄-BIOTIN)-OH-(ACID)

SKU: QBD-10613



DESCRIPTION

Fmoc-N-Lys-(dPEG®4-biotin)-OH, product number QBD-10613, permits the incorporation of a short (16 atoms), biotinylated discrete PEG (dPEG®) into a peptide chain using standard Fmoc chemistry. The biotin-dPEG®4 moiety is conjugated to the side chain of Fmoc-N-protected lysine. By design, this product permits the incorporation of a water-soluble biotin label into a peptide chain. The biotin label allows users to take advantage of the very strong affinity binding between biotin and avidin or streptavidin to use for pretargeted drug delivery, affinity chromatography, and other novel applications.

Peptide synthesis frequently uses PEGylation to improve the water solubility of hydrophobic peptides and protect peptides from enzymatic degradation in serum. The dPEG® linker also increases the PEGylated peptide's hydrodynamic volume, which in turn increases the peptide's half-life in serum. Fmoc-N-Lys-(dPEG®4-biotin)-OH uses familiar Fmoc chemistry with either solid phase or solution phase peptide synthesis. Although most customers will want to put the biotinyl-Lysine residue on one end of a peptide chain, the biotin label can be incorporated into the peptide chain wherever it is convenient to do so.
Biotin is normally poorly soluble in water or aqueous buffers. However, when conjugated to a short, discrete PEG linker, though, it becomes highly water-soluble. Moreover, because the dPEG®4 spacer adds hydrophilicity to the peptide, there will be fewer concerns about insolubility, aggregation, and precipitation than there would be if using biocytin or LC-biotin.

SPECIFICATIONS

CAS Number	1334172-64-3

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

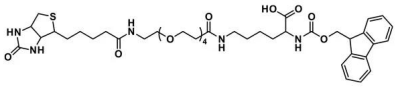
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

Molecular Weight	842.01; single compound
Chemical Formula	$C_{42}H_{59}N_5O_{11}S$
Purity	> 98%
Unit Size	100mg, 1000mg
Solubility	Methylene chloride, DMAC or DMSO.
Spacers	dPEG® Spacer is 16 atoms and 19.1 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



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