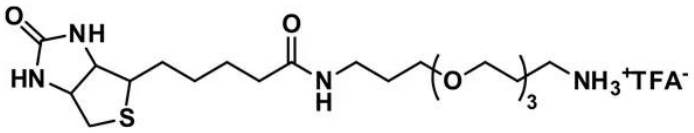
www.vectorlabs.com
Email: customerservice@vectorlabs.com
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BIOTIN-DPEG®₃-NH₃+TFA-

SKU: QBD-10193



DESCRIPTION

Biotin-dPEG®3-NH3+TFA– (Biotin-dPEG®3-ammonium trifluoroacetate), product number QBD-10193, is one of several biotinylation (biotin-labeling) products offered by Vector Laboratories, Inc. The product reacts with activated esters (N-hydroxysuccinimide, 2,3,5,6-tetrafluorophenyl) of carboxylic acids under mildly basic conditions. It can be coupled directly to a carboxylic acid using 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC) chemistry. Also, the product can react with carbonyl groups (aldehydes or ketones) to form a Schiff base that can be reduced to a secondary amine using sodium cyanoborohydride if additional conjugate stability is necessary.

Amphiphilic biotin-dPEG®3-NH3+TFA– dissolves equally well in aqueous buffers and organic solvents. Unlike traditional, hydrophobic biotin-labeling products, this product does not need to be dissolved in an organic solvent before being used in an aqueous reaction medium. Furthermore, biotinylation of biomacromolecules with QBD-10193 will not cause aggregation and precipitation. Eliminating aggregation should consequently improve signal-to-noise ratios in applications developed with this product. Reaction with a carboxylic acid or active ester of a carboxylic acid will yield a stable amide bond. Aldehydes are uncommon in biomacromolecules but form by oxidizing reducing sugars in glycosylated proteins. Reactions with aldehydes produce imines that can be reduced under mild conditions to secondary amines with sodium cyanoborohydride.

Any application that can utilize the powerful biotin-avidin/streptavidin affinity can use Biotin-dPEG®3-NH3+TFA–. The terminal amine of QBD-10193 offers the opportunity to biotinylate (1) the carbohydrate coat of glycoproteins and (2) surfaces consisting of carboxylic acids or their active esters. Thus, Biotin-dPEG®3-NH3+TFA– expands the range of molecules and

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nanoparticles for which dPEG®-biotin is useful.

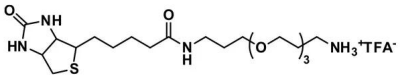
SPECIFICATIONS

CAS Number	1334172-59-6
Molecular Weight	560.63; single compound
Chemical Formula	$C_{22}H_{39}F_3N_4O_7S$
Purity	> 98%
Unit Size	100 mg, 1000 mg
Solubility	Methylene chloride, DMAC, DMSO or water.
Spacers	dPEG® Spacer is 15 atoms and 18.1 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



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