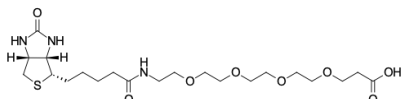


Biotin-PEG4-carboxylic acid

<http://www.lumiprobe.com/p/biotin-peg4-carboxylic-acid>

Biotin-PEG4-carboxylic acid is a bifunctional tetraethyleneglycol derivative bearing a carboxy group and biotin moiety. The carboxy group can be activated with peptide coupling reagents like PyBOP or carbodiimides like EDC to form a stable amide linkage with amines. Biotin-labeled biomolecules can be bound to avidin or streptavidin for further purification and detection.

The structure of this reagent features a long hydrophilic PEG4 linker that separates biotin residue from the target molecule for efficient binding with streptavidin. The linker also enhances aqueous solubility to facilitate conjugation.



Structure of Biotin-PEG4-carboxylic acid

General properties

Appearance: white to beige powder

Molecular weight: 491.61

CAS number: 721431-18-1

Molecular formula: $C_{21}H_{37}N_3O_8S$

IUPAC name: 3-[2-[2-[2-[2-[5-[(3aS,4S,6aR)-2-oxo-1,3,3a,4,6,6a-hexahydrothieno[3,4-d]imidazol-4-yl]pentanoylamino]ethoxy]ethoxy]ethoxy]ethoxy]propanoic acid

Solubility: good in water, DMSO, DMF

Quality control: NMR 1H and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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