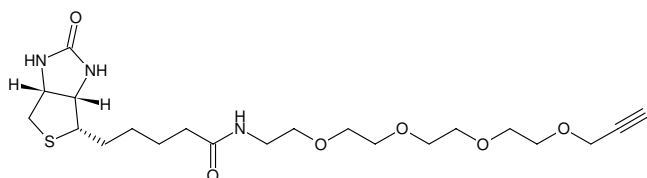


Acetylene-PEG₄-Biotin

Cat. No.	Amount
CLK-TA105-25	25 mg
CLK-TA105-100	100 mg
CLK-TA105-1000	1 g

Structural formula of Acetylene-PEG₄-Biotin**For research use only!****Shipping:** shipped at ambient temperature**Storage Conditions:** store at -20 °C**Shelf Life:** 12 months after date of delivery**Molecular Formula:** C₂₁H₃₅N₃O₆S**Molecular Weight:** 457.58 g/mol**CAS#:** 1262681-31-1**Purity:** > 90 % (H NMR)**Form:** powder**Color:** white**Solubility:** Chloroform, DCM, DMF, DMSO, THF**Description:**

Acetylene-PEG₄-Biotin is suitable for the introduction of a biotin moiety to Azide-labeled biomolecules via Cu(I)-catalyzed Alknyne-Azide (CUAAC) reaction.

The hydrophilic PEG₄ linker [26.4 Å (22 atoms)] reduces or eliminates aggregation and precipitation during the labeling process by increasing the hydrophilicity of the target molecule. It furthermore enhances the accessibility of the biotin moiety and thus the detection efficiency of the biotinylated molecule via fluorescent or HRP-labeled streptavidin or its affinity purification via streptavidin agarose.

Due to the extremely high affinity of biotin towards streptavidin (K_D = 10⁻¹⁵ M), the biotinylated molecule/streptavidin-interaction is essentially irreversible under physiological conditions.

Related Products:Copper (II)-Sulphate (CuSO₄), #CLK-MI004

Tris(3-hydroxypropyltriazolylmethyl)amine (THPTA), #CLK-1010

Sodium Ascorbate (Na-Ascorbate), #CLK-MI005