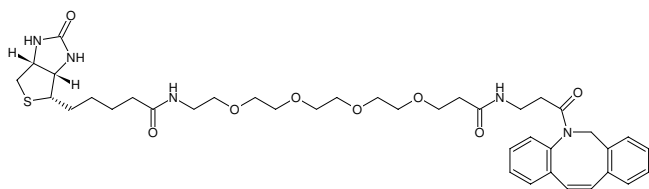




DBCO-PEG₄-Biotin Conjugate

Dibenzylcyclooctyne-PEG₄-Biotin Conjugate

Cat. No.	Amount
CLK-A105P4-10	10 mg
CLK-A105P4-100	10 x 10 mg



Structural formula of DBCO-PEG₄-Biotin Conjugate

For general laboratory use.

Shipping: shipped at ambient temperature

Storage Conditions: store at -20 °C

Additional Storage Conditions: store undissolved, for use prepare a fresh solution

Shelf Life: 12 months after date of delivery (undissolved)

Molecular Formula: C₃₉H₅₁N₅O₈S

Molecular Weight: 749.92 g/mol

Exact Mass: 749.34 g/mol

CAS#: 1255942-07-4

Purity: ≥ 90 % (HPLC)

Form: off-white to slightly yellow solid at storage conditions, tends to become sticky amorphous solid

Color: off-white to slightly yellow

Solubility: DMF, DMSO

Description:

DBCO-PEG₄-Biotin is suitable for the introduction of a biotin moiety to Azide-labeled biomolecules via Cu(I)-free strain-promoted Alkyne-Azide Click Chemistry (SPAAC) reaction.

The hydrophilic PEG₄ linker [22.8 Å (19 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.