



Product Specifications

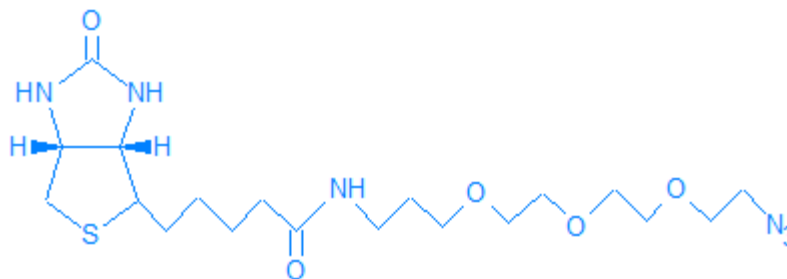
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

Oligo Modifications

For research use only. Not for use in diagnostic procedures for clinical purposes.

BiotinTEG Azide

Category	Click Chemistry
Modification Code	Bio-TEG-N3
Reference Catalog Number	26-6721
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	444.55



Biotin-TEG Azide
[26-6721-XX]

[Click here for a list of other Affinity Ligand Modifications.](#)

Biotin-TEG Azide is a biotin attached to a 15-atom mixed polarity triethylene glycol spacer with an azide group at the end of the spacer. The presence of the azide allows the user to use "Click Chemistry" (a [3+2] cycloaddition reaction between alkynes and azides, using copper (I) iodide as a catalyst) to conjugate the Biotin-TEG Azide to a terminal alkyne-modified oligo with extremely high regioselectivity and efficiency (1,2). Preparation of the alkyne-modified oligo can be achieved using the 5'-Hexynyl modifier (see its respective tech sheet for details). The spacer acts to minimize steric hindrance between the biotin moiety and the oligo, thereby providing streptavidin easy access to the biotin for capture and immobilization of the oligo. Additional technical details for biotin are presented in the Biotin technical sheet. **References**

1. Huisgen, R. *Angew. Chem. Int. Ed.* (1963), **2**: 565-568.

2. Rostovtsev, V.V., Green, L.G., Fokin, V.V., Sharpless, K.B. A Stepwise Huisgen Cycloaddition Process: Copper(I)-Catalyzed Regioselective Ligation of Azides and Terminal Alkynes. *Angew. Chem. Int. Ed.* (2002), **41**: 2596-2599.