



Product Specifications

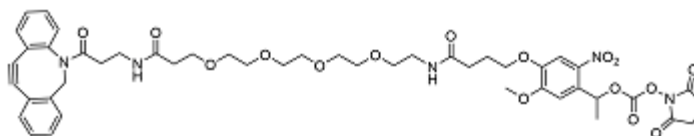
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

Oligo Modifications

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

DBCO PC NHS

Category	Click Chemistry
Modification Code	DBCO PC N
Reference Catalog Number	26-6744
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	0



This modification is a post synthesis NHS conjugation to a primary amino group thus an additional modification with an amino group is required. A C6 or C12 amino group can be placed at the 5' or for the 3' end a C3 or C7 amino and for internal positions an amino modified base is used, e.g Amino dT C6.

Click here for a complete list of Click Chemistry Oligo Modifications

Photocleavable DBCO-NHS ester contains a spacer arm containing a photocleavable moiety, this can be efficiently photoreleased, typically >90% in 5-25 minutes using a near-UV low intensity lamp (e.g. 365 nm lamp at 1-5 mW/cm²). Cyclooctyne-based modifications offers the ease of copper-free click reagents. These are simple to use and has excellent click performance in 17 hours or less at room temperature. Gene Link offers 5'-DBCO-TEG for preparing oligos with 5'-DBCO and a 15 tom triethylene glycol spacer arm, DBCO-dT for inserting a DBCO group at any position within the oligonucleotide and DBCO-sulfo-NHS Ester is also offered for post-synthesis conjugation reactions. DBCO-modified oligos may be conjugated with azides in organic solvents, such as DMSO, or aqueous buffers. Depending on the azide used, the reaction will go to completion in 4-17 hours at room temperature.

Photo Cleavage Protocol Cleavage occurs by irradiation with near-UV light (300-350 nm, >90% cleavage occurs within 5-25 minutes. Try using a Black Ray XX-15 UV lamp (Ultraviolet Products Inc., San Gabriel, CA) at a distance of 15 cm (emission peak 365 nm, 300 nm cut-off, 1.1 mW intensity at ~31 cm).