Product Specifications

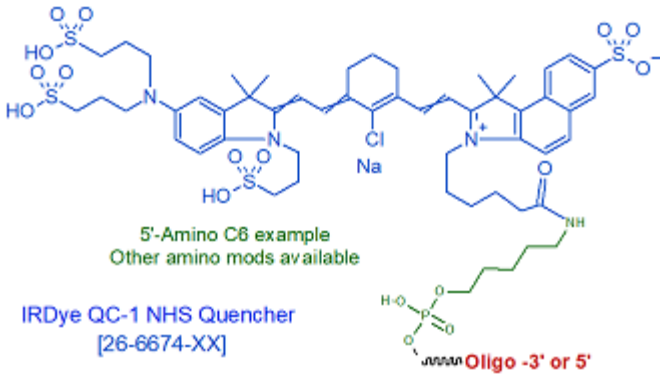
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2′-5′ linked Oligos

Oligo Modifications

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

IRDye QC-1N Quencher

Category	Quenchers
Modification Code	IRD-QC-1
Reference Catalog Number	26-6674
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	1145.67



Click here for a list of fluorophores.

This modification is a post synthesis conjugation to a primary amino group thus an additional modification with an amino group is required. A C3, 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. IRDye QC-1 is a non-fluorescent (dark) quencher compatible with a wide range of visible and near-infrared fluorophores (~500-800 nm). The Absorption max in 1X PBS is 737 nm and 788 nm in water.It has a wide quenching range. IRDye QC-1 quenches common fluorophores with >97% efficiency.
We recommend to consider **BBQ-650** quencher as a excellent substitute. See table below.

Click here for list of quenchers.

Click here for a list of fluorophores.

Quencher Spectral Data

Quencher

Absorption Max, nm

Quenching Range, nm **Dabcyl** 453 380-530 **BHQ-0** 495 430-520 **BHQ-1** 534 480-580 **BHQ-2** 579 550-650

genelink.com/newsite/products/mod_detail.asp?modid=127">BHQ-3 672 620-730 **BBQ-650** 650 550-750 Click here for complete list of quenchers and details **Black Hole Quencher License Agreement

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Yield of Post Synthesis NHS, Maleimide & Click Ligand Conjugation* Oligo Scale of Synthesis Yield, nmols 50 nmol 2 nmol 200 nmol 5 nmol 1 umol 16 nmol 2 umol 30 nmol 5 umol 75 nmol 10 umol 150 nmol 15 umol 225 nmol * The yield will be lower for oligos longer than 50mer. Click here for yield table of long oligos. * Click here for RNA Oligos scale of synthesis and yield. **NHS Ligand conjugation** requires a primary amino group. Gene Link offers a wide selection of amino modifications for 5', 3' and internal sites. Click here for a list of conjugation chemistry modifications. **Maleimide Ligand conjugation** requires a thiol group. Gene Link offers a wide selection of thiol modifications for 5', 3' and internal sites. Click here for a list of conjugation chemistry modifications. **Click Chemistry Ligand conjugation** requires a corresponding Click modification; examples Alkyne:Azide, Azide:DBCO, BCN:Azide, BCN: TCO:Tetrazine. Gene Link offers a wide selection of click modifications for 5', 3' and internal sites. Click here for a list of click chemistry modifications.

IRDye QC-1 is a non-fluorescent (dark) quencher compatible with a wide range of visible and near-infrared fluorophores (~500-800 nm). It has a wide available quenching range with the maxima in the range of 700-800 nm. IRDye QC-1 quenches common fluorophores with >97% efficiency. It is ideal for all IR dyes.