



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

IRDye QC-1 quencher is a post synthesis 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. **YIELD** NHS based modifications are post synthesis conjugation performed using a primary amino group. The yield is lower as compared to direct automated coupling of modifications that are available as amidites. Approximate yield for various scales are given below.

~2 nmol final yield for 50 nmol scale synthesis.

~5 nmol final yield for 200 nmol scale synthesis.

~16 nmol final yield for 1 umol scale synthesis

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.