



## Product Specifications

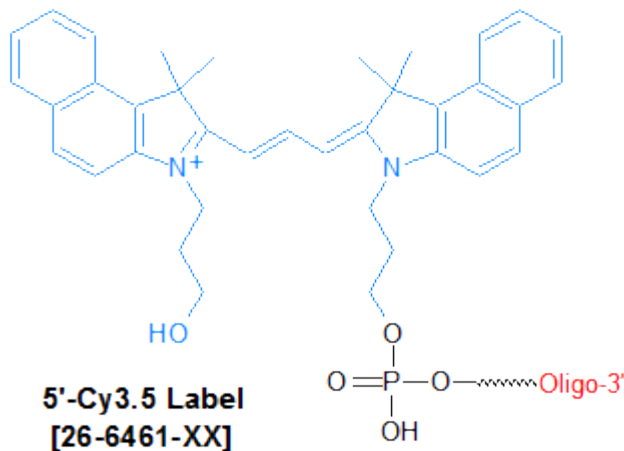
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

## Oligo Modifications

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

### Cy3.5

Category	Fluorescent Dyes
Modification Code	Cy3.5
Reference Catalog Number	26-6461
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	607.7



Cyanine 3.5 (Cy3.5) is a fluorescent dye that belongs to the Cyanine family of synthetic polymethine dyes. Cy3.5 is reactive, water-soluble, and has an absorbance maximum of 581 nm and an emission maximum of 596 nm. It is available as a phosphoramidite, and is used to fluorescently label oligonucleotides at either the 5'- or 3'-end, or internally. Cy3.5 plays a particularly important role in real-time PCR applications, being used as a reporter moiety in TaqMan probes (1), Scorpion primers (2) and Molecular Beacons (3). For such probes, Cy3.5 is most commonly paired with the dark quencher BHQ-2, as the two have excellent spectral overlap.

Cy3 can also be used to label DNA oligos for use as hybridization probes in other applications, such as Fluorescent In-Situ Hybridization (FISH). **References**

1. Livak, K.J., Flood, S.J.A., Marmaro, J., Giusti, W., Deetz, K. Oligonucleotides with fluorescent dyes at opposite ends provide a quenched probe system useful for detecting PCR product and nucleic acid hybridization. *PCR Methods Appl.* (1995), **4**: 1-6.
2. Thelwell, N., Millington, S., Solinas, A., Booth, J., Brown, T. Mode of action and application of Scorpion primers to mutation detection. *Nucleic Acids Res.* (2000), **28**: 3752-3761.
3. Tyagi, S., Kramer, F.R. Molecular beacons: probes that fluoresce upon hybridization. *Nat. Biotechnol.* (1996), **14**: 303-308.