

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.

Dabcyl-5'

Category	Quenchers	
Modification Code	Dab-5	H ₂ N ₁ , O
Reference Catalog Number	26-6704	$(Me)_2N$ N N N N N N N N N
5 Prime	Υ	
3 Prime	Υ	
Internal	N	
Molecular Weight(mw)	462.44	Dabcyl-5' [26-6704-XX]

Dabcyl-55 is classified as a dark quencher (a non-fluorescent chromophore), and is typically used to label a Fluorescence Resonance Energy Transfer (FRET) DNA oligonucleotide probe with a quencher moiety at the 5'-end. TaqMan or Molecular Beacon probes labeled with Dabcyl at the 5'-end usually would be labeled with an appropriate fluorescent dye at the 3'-end; other kinds of FRET probes might have the fluorescent dye at an internal position. 5'-end labeling such probes with Dabcyl is unusual. The primary reason for using this inverse-labeling strategy is to take advantage of Dabcyl's very high hydrophobicity (which is higher than that of a fluorescent dye) to improve subsequent purification of the probe by HPLC or RPC. For example, a molecular beacon with 5'-Dabcyl and 3'-6-FAM is easier to purify (and will subsequently be purer) than a probe with the more common, opposite set-up.

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 BHQ1 534 480-580 BHQ2 579 550-650 BHQ3 672 620-730 BBQ-650 650 550-750 Click here for complete list of quenchers and details **Black Hole Quencher License Agreement Black Hole Quencher License Agreement. "Black Hole Quencher[®], BHQ[®], CAL Fluor[®] and Quasar[®] are registered trademarks of Biosearch Technologies, Inc.



, Petaluma, California. The BHQ, CAL Fluor and Quasar dye technologies are protected by U.S. and world-wide patents either issued or in application. Compounds incorporating these dyes are made and sold under agreement with Biosearch Technologies, Inc. for end-user's non-commercial research and development use only. Their use in commercial applications is encouraged but requires a separate Commercial Use License granted by Biosearch Technologies, Inc."

