

## **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.

## **Marina Blue**

Category Fluorescent Dyes

Modification Code MBlue NHS

Reference Catalog Number 26-6687

5 Prime Y

3 Prime Y

Internal Y

Molecular Weight(mw) 284.22

Marina Blue [26-6687]

Marina Blue is a proprietary dye manufactured by Life Tech/ThermoFisher, it is available as a fluorescent dye that can be conjugated to an oligo, either RNA or DNA. This is a post synthesis conjugation to a primary amino group. The amino group can be placed at the 5' and 3' and for internal positions an amino modified base is used, e.g Amino dT C6

The amine-reactive Marina Blue® succinimidyl ester can be used to create blue-fluorescent bioconjugates. Based on the 6,8-difluoro-7-hydroxycoumarin fluorophore, Marina Blue® dye exhibits bright blue fluorescence emission near 460 nm and is optimally excited by the intense 365 nm spectra line of the mercury-arc lamp. Because the pKa values of Marina Blue® derivatives are 2-3 log units lower than those of the corresponding 7-hydroxycoumarin conjugates, Marina Blue® conjugates are strongly fluorescent even at neutral pH.

