



## 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.

### CF-450 Dye N

Category	Fluorescent Dyes
Modification Code	CF-450-N
Reference Catalog Number	26-6816
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	689

[Click here for a list of fluorophores.](#)

See detailed technical specifications of the CF Dyes. [Biotium CF Dyes Technical Specifications.](#)  
[Biotium CF Dyes Reference Guide](#) .

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.

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.

[genelink.com/oligo\\_modifications\\_reference/OMR\\_mod\\_category\\_intro.asp?mod\\_sp\\_cat\\_id=2](http://genelink.com/oligo_modifications_reference/OMR_mod_category_intro.asp?mod_sp_cat_id=2)">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.

CF Dyes (CF is a registered trademark of Biotium, Inc.) are a series of highly water-soluble fluorescent dyes spanning the visible and near-infrared spectrum for labeling biomolecules. These are available over a wide range of visible and near IR range. These offer superior brightness, photostability, and signal-to-noise detection.

CF Dyes are available as amine-reactive forms that is used to conjugate them to a primary amine modifications in an oligo. CF is a registered trademark of Biotium, Inc.