



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.

LC Cyan 500

Category	Fluorescent Dyes
Modification Code	LC C500
Reference Catalog Number	26-6688
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	580

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** 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.

Yield given below are for oligos shorter than 50mer. Please see longer oligos yield at this link [Long Oligo Typical Yield](#).

~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

~32 nmol final yield for 2 umol scale synthesis

~160 nmol final yield for 10 umol scale synthesis

~240 nmol final yield for 15 umol scale synthesis

Cyan 500 NHS ester is an amine-reactive fluorescent label. It is designed and recommended by Roche for application in LightCycler® instruments. The dye is used to label amino-modified oligonucleotides which can be detected on excitation at 430 nm in Roche LightCycler® instruments.

Fluorescence properties of LC Cyan 500 has an Excitation max of 436 nm and Emission max at 481 nm. A close substitution will be AF488 with Excitation max of 494 nm and Emission max at 517 nm or Fam Excitation max of 495 nm and Emission max at 520 nm.