

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.

Tamra-dT

Carboxytetramethylrhodamine-deoxythymidien (TAMRA-dT) is a deoxythymidine nucleoside derivitized with TAMRA through a spacer arm. TAMRA-dT is used to internally label an oligonucleotide at a dT position. TAMRA-dT has an absorbance maximum of 565 nm and an emission maximum of 580 nm. TAMRA-dT can be used to internally label a Fluorescence Resonance Energy Transfer (FRET) DNA oligonucleotide probe with a quencher moiety. Such a labeling strategy is pertinent in cases where the distance between the quencher and fluorophore needs optimization for efficient quenching. For such probes, 6-FAM is most commonly used as the reporter moiety as the two dyes have excellent spectral overlap.

TAMRA-dT also can be used to label DNA oligos for use as hybridization probes in a variety of in vivo and in vitro research or diagnostic applications, as well as for structure-function studies of DNA, RNA, and protein-oligonucleotide complexes. Oligos internally labeled with TAMRA-dT also can be used as PCR and DNA sequencing primers to generate fluorescently-labeled PCR, sequencing or genetic analysis (AFLP or microsatellite) products. For further details concerning the TAMRA dye, please see the technical sheet for it.

