



Product Specifications

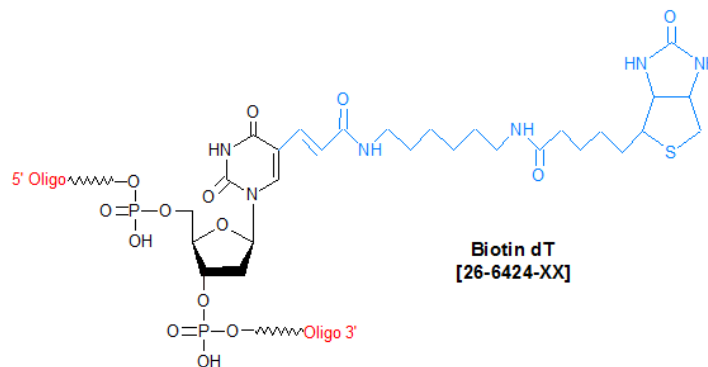
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

Oligo Modifications

For research use only. Not for use in diagnostic procedures for clinical purposes.

Biotin dT

| | |
|--------------------------|------------------|
| Category | Affinity Ligands |
| Modification Code | Bio-dT |
| Reference Catalog Number | 26-6424 |
| 5 Prime | Y |
| 3 Prime | Y |
| Internal | Y |
| Molecular Weight(mw) | 684.7 |



Biotin-dT is a deoxythymidine nucleotide base attached to biotin through a long-chain alkyl spacer arm. Biotin-dT is typically used to label an oligonucleotide with biotin at an internal base position, though it can also be used for 5'- and 3'-end labeling as well. Internal biotin-labeling is necessary when an oligo needs to be captured or immobilized, but both ends are unavailable. A good example of this is the use of internal biotin-labeling to facilitate the immobilization of a molecular beacon on a glass slide (1). The internal labeling strategy can also be used to label a hybridization detection probe with several biotins to enhance detection of a target sequence with anti-biotin antibodies attached to colored particles (2), fluorescent dyes, or enzymes. **References**

1. Fang, X., Liu, X., Schuster, S., Tan, W. Designing a novel molecular beacon for surface immobilized DNA hybridization studies. *J. Am. Chem. Soc.* (1999), **121**: 2921-2922.
2. Dineva, M.A., Candotti, D., Fletcher-Brown, F., Allain, J-P., Lee, H. Simultaneous Visual Detection of Multiple Viral Amplicons by Dipstick Assay. *J. Clin. Microbiol.* (2005), **43**: 4015-4021.