HEX

**Category**

- **Fluorescent Dyes**

**Modification Code**

- HEX

**Reference Catalog Number**

- 26-6432

**5 Prime**

- Y

**3 Prime**

- Y

**Internal**

- N

**Molecular Weight (mw)**

- 744.13

Hexachloro-fluorescein (HEX) is hexachlorinated version of the fluorescent dye fluorescein, and is used for labeling oligonucleotides at either the 5’- or 3’-end. HEX has an absorbance maximum of 535 nm and an emission maximum of 556 nm. HEX can be used in real-time PCR applications as a reporter moiety in TaqMan probes (1), Scorpion primers (2) and Molecular Beacons (3). For such probes, HEX is most commonly paired with the dark quencher BHQ-1, as the two have good spectral overlap.

HEX 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 labeled with HEX at the 5’-end can be used as PCR and DNA sequencing primers to generate fluorescently-labeled PCR, sequencing or genetic analysis (AFLP or microsatellite) products. NOTE: If HEX is on the 3’-end of the oligo, it cannot be used as a primer in PCR-based applications.

**References**

