Tetrachloro fluorescein (TET) is tetra-chloro derivative of fluorescein that is used to fluorescently label oligonucleotides. TET has an absorbance maximum of 522 nm and an emission maximum of 538 nm. TET plays a role in real-time PCR applications, being used as a reporter moiety in TaqMan probes (1), Scorpion primers (2) and Molecular Beacons (3). For such probes, TET is most commonly paired with the dark quencher BHQ-1, as the two have excellent spectral overlap.

TET 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 TET 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. 

References