iFluor™ 555 TCO

Product Details

Storage Conditions  
Freeze (<-15 °C), Minimize light exposure

Expiration Date  
12 months upon receiving

Chemical Properties

Appearance  
Solid

Molecular Weight  
1036.98

Soluble In  
DMSO

Spectral Properties

Excitation Wavelength  
557 nm

Emission Wavelength  
570 nm

Applications

The tetrazine-trans-cyclooctene (TCO) ligation constitutes a non-toxic biomolecule labeling method of unparalleled speed. A tetrazine-functionalized molecule reacts with a TCO-functionalized molecule, forming a stable conjugate via a dihydropyrazine moiety. This has gained popularity due to its extremely fast kinetics. AAT Bioquest offers a group of tetrazine- and TCO-containing dyes for exploring various biological systems that can use this powerful click reaction. iFluor™ 555-TCO can be readily used to label tetrazine-modified biological molecules for fluorescence imaging and other fluorescence-based biological applications. The peptide and oligo conjugates prepared with iFluor™ 555 dye are far superior compared to the conjugates of other spectrally similar dyes such as the popular Cy3 and Alexa Fluor® 555. iFluor™ 555 conjugates are significantly brighter and much more photostable than the corresponding conjugates of Cy3 and Alexa Fluor® 555 (Alexa Fluor® is the trademark of Invitrogen).