

**iFluor™ 647 TCO**

Catalog number: 1011

Unit size: 1 mg

**Product Details**

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Storage Conditions Freeze (&lt;15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

**Chemical Properties**

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Appearance Solid

Molecular Weight 1181.33

Soluble In DMSO

**Spectral Properties**

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Excitation Wavelength 656 nm

Emission Wavelength 670 nm

**Applications**

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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™ 647-TCO can be readily used to label tetrazine-modified biological molecules for fluorescence imaging and other fluorescence-based biological applications. The conjugates prepared with iFluor™ 647 dye have spectral properties almost identical to the popular Cy5 and Alexa Fluor® 647. In the most cases, the antibody conjugates prepared with iFluor™ 647 tend to have higher signal/background ratio than the spectrally similar dye conjugates (sch as Cy5 and Alexa Fluor® 647, Alexa Fluor® is the trademark of Invitrogen).