

## Product Information Sheet

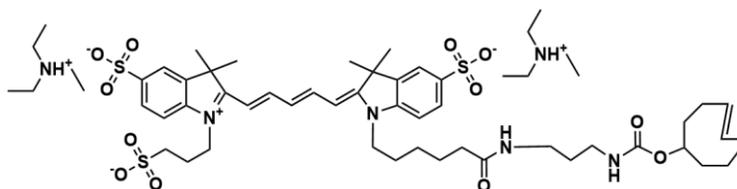
### Ordering Information

Product Number:	901
Product Name:	Cy5 trans-cyclooctene [Cy5 TCO]
Unit Size:	1 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	12 months upon receiving

### Chemical and Spectral Properties

Molecular Weight: 1161.58

Chemical Structure:



Soluble in:	DMSO
Excitation Wavelength:	649 nm
Emission Wavelength:	665 nm

### Application Notes

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 inverse electron demand cycloaddition reaction has gained popularity due to the potential for extremely fast cycloaddition kinetics with TCO as the dienophile. AAT Bioquest offers a group of tetrazine- and TCO-containing dyes for exploring various biological systems that can use this powerful click reaction. Cy3-TCO has been used to label biological molecules for fluorescence imaging and other fluorescence-based biochemical analysis. It is widely used for labeling peptides, proteins and oligos etc. Cy3 dyes have enhanced fluorescence upon binding to proteins.