

## Product Information Sheet

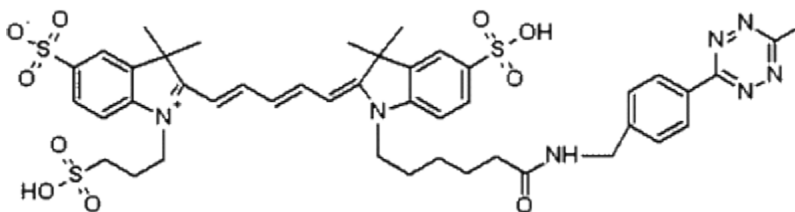
### Ordering Information

Product Number: 911  
Product Name: Cy5 tetrazine [Cy5 tetrazine]  
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: 934.11

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. Cy5-tetrazine 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.