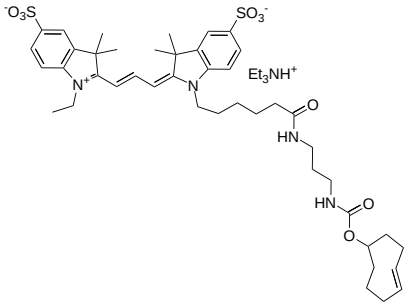
Cy3 trans-cyclooctene [Cy3 TCO]

Catalog Number: 900
Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid purple
Molecular Weight	940.26
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	555 nm
Emission Wavelength	569 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 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 poweful 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.