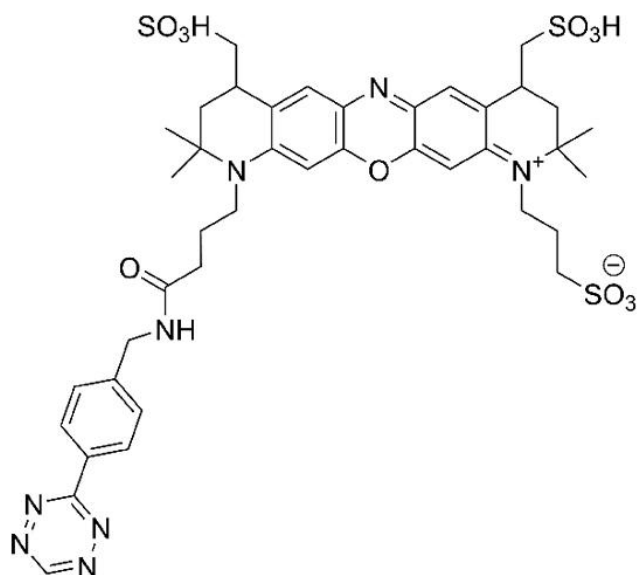




AZDYE 660R TETRAZINE

SKU: CCT-1504

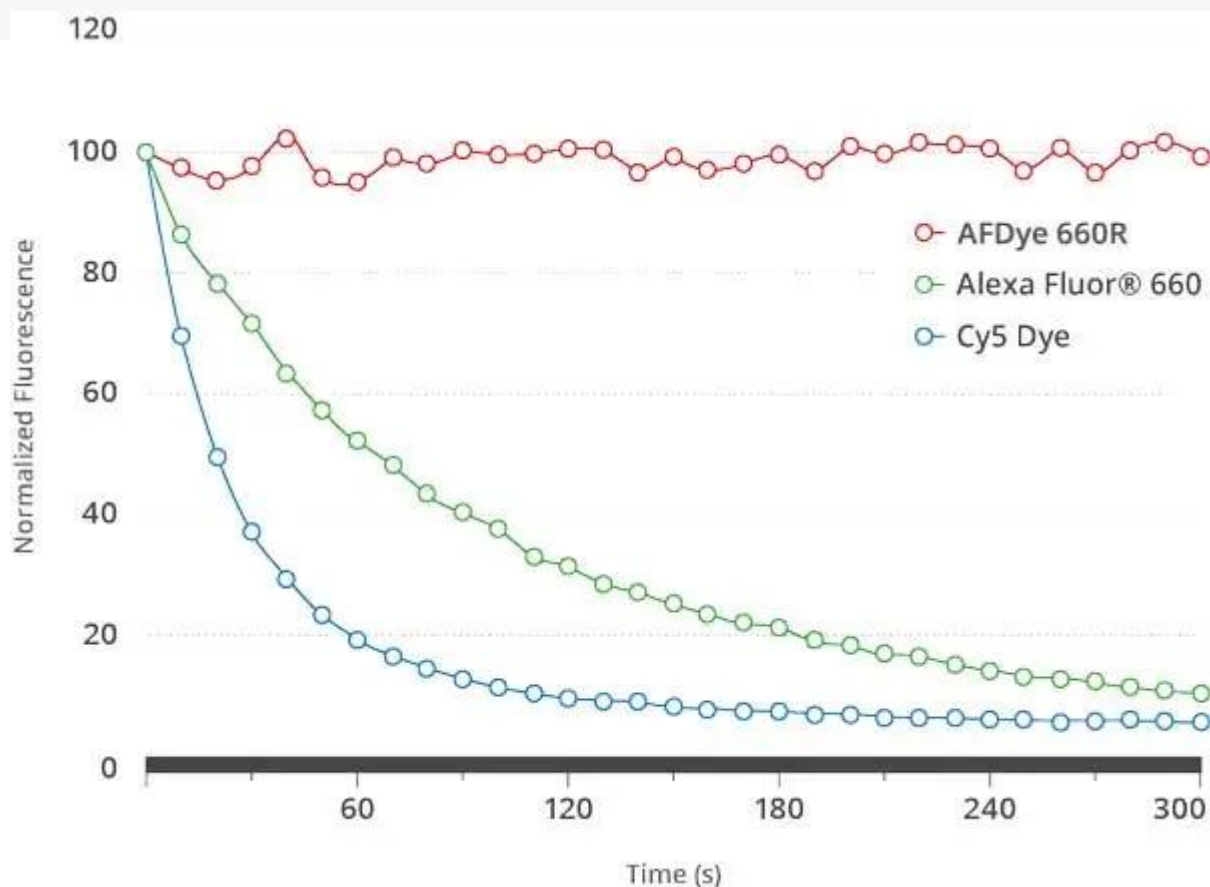


DESCRIPTION

Tetrazines demonstrate exceptionally fast cycloaddition kinetics (up to $30\,000\text{ M}^{-1}\text{ s}^{-1}$) with trans-cyclooctenes (TCO) as the dienophile, the fastest kinetics ever reported for any bioorthogonal reaction. In addition, inverse-Electron-Demand Diels-Alder reaction of tetrazines trans-cyclooctene forms a stable covalent bond and does not require Cu-catalyst or elevated temperatures.

AZDye 660R is a bright and photostable far-red dye that emits fluorescence at about 685 nm in the borderline spectral region between far-red and near-IR. Although the absorption maximum is at around 665 nm, this dye can be sufficiently excited by the 633 or 635 nm laser. AZDye 660R dye is water soluble and pH-insensitive from pH 4 to pH 10. AZDye 660R is a rhodamine-based dye, and like rhodamine dyes in general, it is exceptionally photostable (Figure 1). The superior photostability and excellent brightness of AZDye 660R make the dye an ideal choice for confocal microscopy and other demanding applications.

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



SPECIFICATIONS

CAS Number	N/A
Molecular Weight	913.05 (protonated)
Appearance	Blue solid
Extinction Coefficient	92,000
Purity	>95% (HPLC)
Unit Size	1 mg, 5 mg, 25 mg
Solubility	Water, DMSO, DMF
Storage Instructions	-20°C. Desiccate
Spectrally Similar Dyes	Alexa Fluor® 660, CF® 660R
Laser Line	633 or 635 nm
Excitation/Emission Maximum	665/690 nm
Shipping Conditions	Ambient temperature

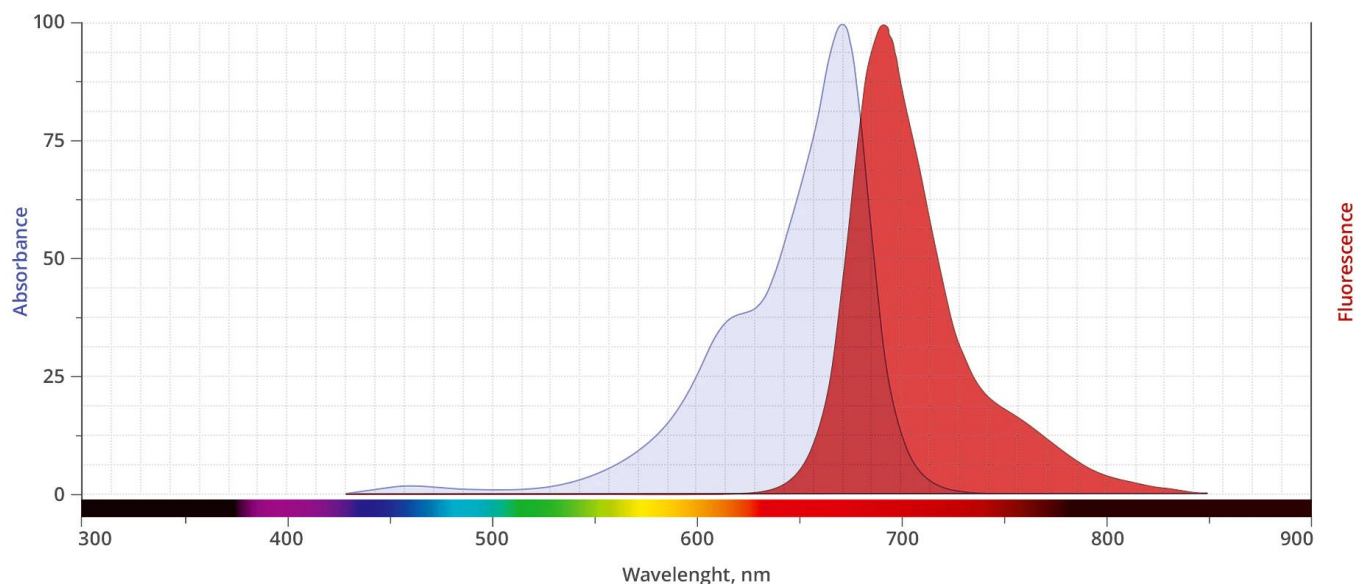
For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



Shipping Instructions

Ambient temperature

ABS/EM SPECTRA



SELECTED REFERENCES

1. Jiang, H., *et al.* (2014). Monitoring Dynamic Glycosylation in Vivo Using Supersensitive Click Chemistry. *Bioconjugate Chem.*, **25**, 698-706. [[PubMed](#)]
2. Uttamapinant, C., *et al.* (2012). Fast, Cell-Compatible Click Chemistry with Copper-Chelating Azides for Biomolecular Labeling. *Angew. Chem. Int. Ed.*, **51**, 5852-56. [[PubMed](#)]
3. Gaebler, A., *et al.* (2016). A highly sensitive protocol for microscopy of alkyne lipids and fluorescently tagged or immunostained proteins. *J. Lipid. Res.*, **57**, 1934-47. [[PubMed](#)]

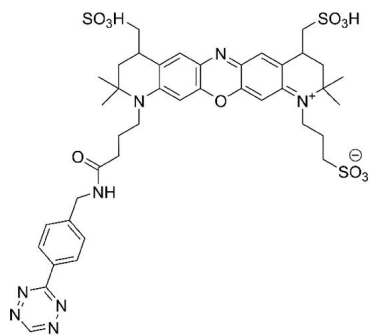
DOCUMENTS

- [Safety Data Sheet](#)
- [Datasheet](#)

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



GALLERY IMAGES



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.