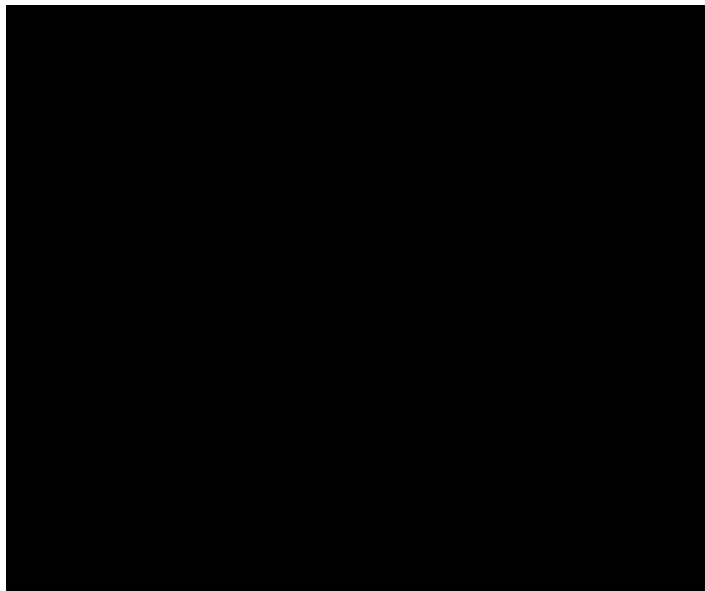




AZDYE 594 PICOLYL AZIDE

SKU: CCT-1296



DESCRIPTION

AZDye™ 594 Picolyl Azide is an advanced fluorescent probe that incorporates a copper-chelating motif to raise the effective concentration of Cu(I) at the reaction site to boost the efficiency of the CuAAC reaction, resulting in a faster and more biocompatible CuAAC labeling. Up to 40-fold increase of signal intensity, compared to conventional azides, was reported (see Selected References).

In addition, the use picolyl azides instead of conventional azides allows for at least a tenfold reduction in the concentration of the copper catalyst without sacrificing the efficiency of labeling, significantly improving biocompatibility of CuAAC labeling protocol.

In summary, the introduction of a copper-chelating motif into azide probe leads to a substantial increase in the sensitivity and reduced cell toxicity of CuAAC detection alkyne-tagged biomolecules. This will be of special value for the detection of low abundance targets or living system imaging.

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



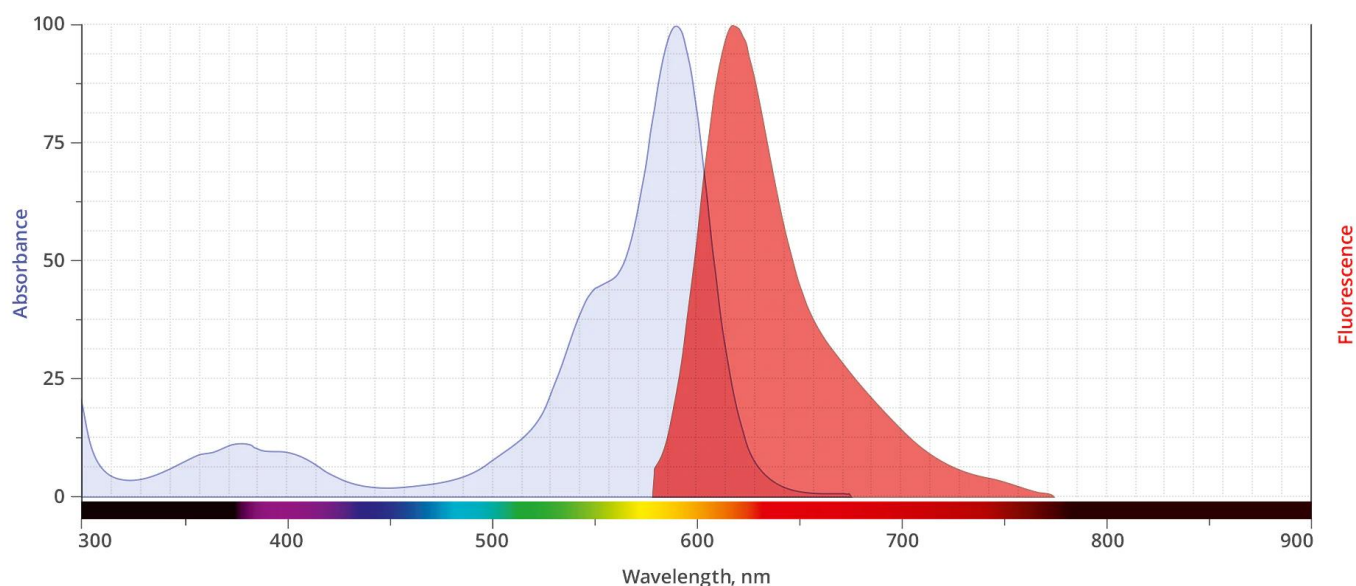
AZDye™ 594 is bright, water-soluble, and pH-insensitive from pH 4 to pH 10 red-fluorescent dye with absorption and emission maxima at 590 and 617 nm, respectively. It can be used with the 561 nm and 594 nm laser lines. AZDye™ 594 dye structurally is identical to Alexa Fluor® 594. Its absorption/emission spectra is a perfect match to spectra of many other fluorescent dyes based on sulfonated rhodamine core, including CF® 594 Dye, DyLight® 594 and Alexa Fluor® 594.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	925.00 (protonated)
Appearance	Red solid
Extinction Coefficient	88,000
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® 594, CF® 594, DyLight® 594
Laser Line	561 nm or 594 nm
Excitation/Emission Maximum	590/617 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

ABS/EM SPECTRA

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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](#)
- [Download CoA](#)
- [Datasheet](#)

GALLERY IMAGES

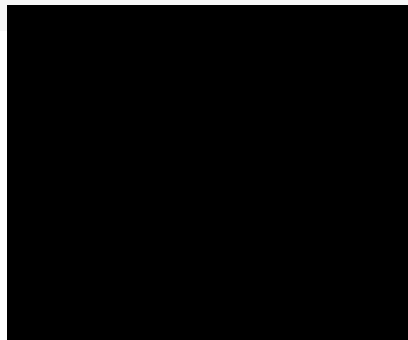
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www.vectorlabs.com

Email: customerservice@vectorlabs.com

Telephone: [\(650\) 697-3600](tel:(650)697-3600)



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