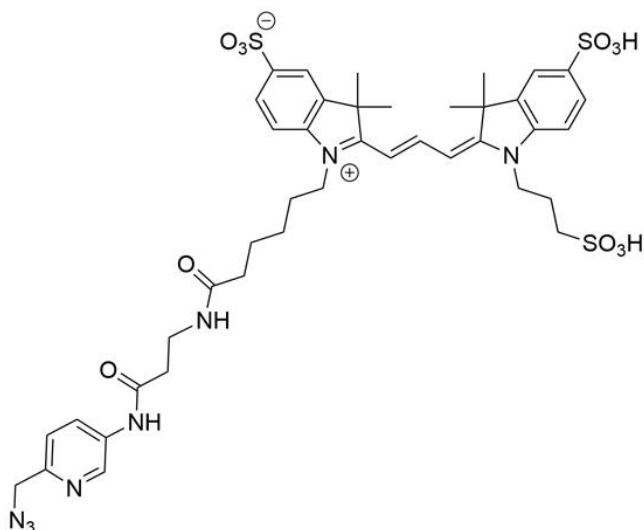




CY3 PICOLYL AZIDE

SKU: CCT-1178



DESCRIPTION

Cy3 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

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biomolecules. This will be of special value for the detection of low abundance targets or living system imaging.

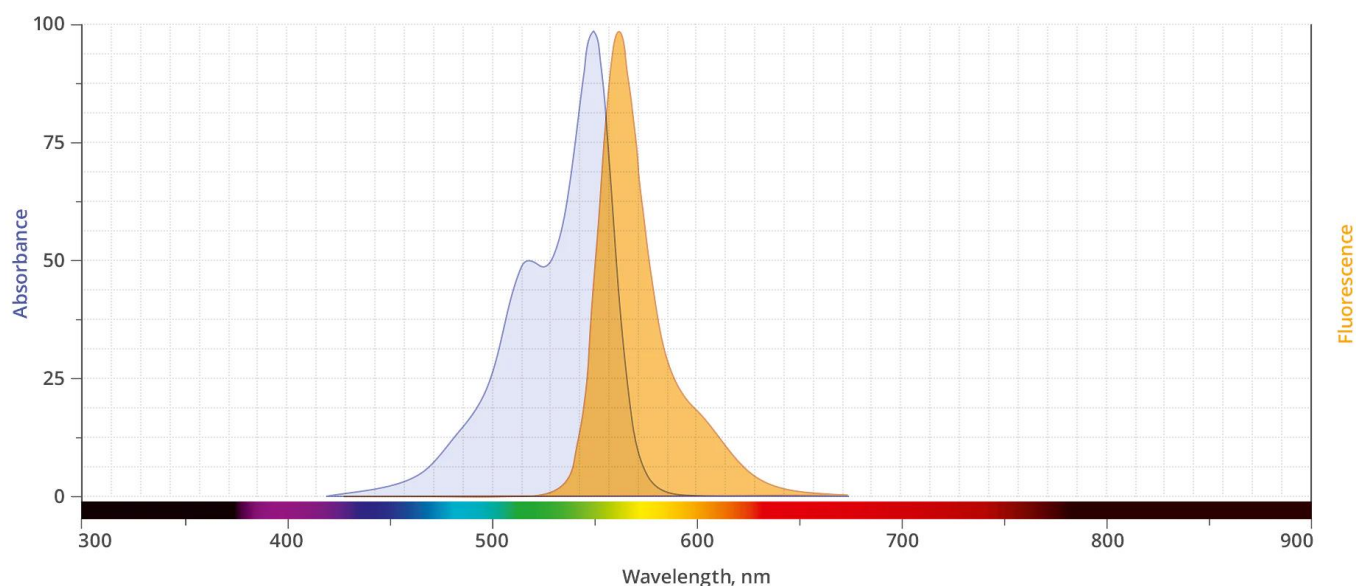
Cy3 Picolyl Azide is a water-soluble, bright orange-fluorescent dye with excitation ideally suited for the 532 nm or 555 nm laser lines and visualized with TRITC (tetramethylrhodamine) filter sets. Cy3 dye is structurally similar, and spectrally is almost identical to Alexa Fluor® 555, CF® 555 Dye, or any other Cyanine3 based fluorescent dyes.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	927.08 (protonated)
Appearance	Red solid
Extinction Coefficient	155,000
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® 555, CF® 555, DyLight® 549, Cy3 Dye
Laser Line	532 nm or 555 nm
Excitation/Emission Maximum	555/572 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

ABS/EM SPECTRA

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SELECTED REFERENCES

1. Couradeau, E., *et al.* (2019). Probing the active fraction of soil microbiomes using BONCAT-FACS *Nat Commun*, **10**, 2770-80. [[PubMed](#)]
2. Jiang, H., *et al.* (2014). Monitoring Dynamic Glycosylation in Vivo Using Supersensitive Click Chemistry. *Bioconjugate Chem.*, **25**, 698-706. [[PubMed](#)]
3. 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](#)]
4. 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](#)

GALLERY IMAGES

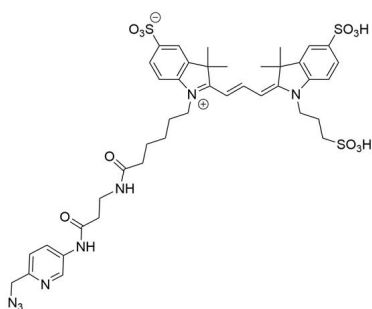
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