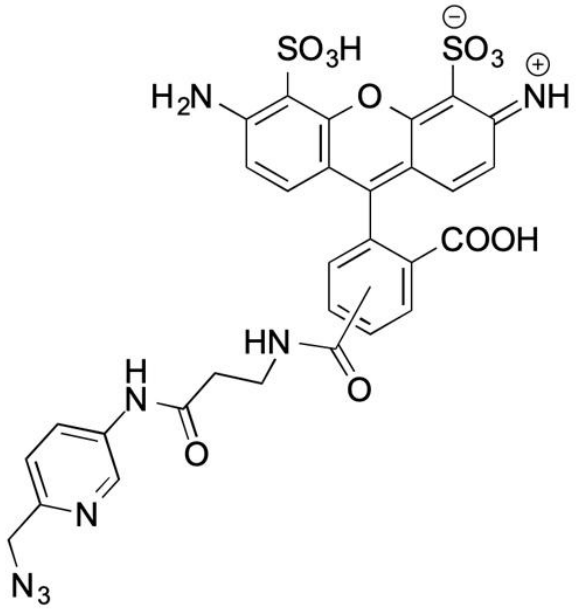
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AZDYE 488 PICOLYL AZIDE

SKU: CCT-1276



DESCRIPTION

AZDye™ 488 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

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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.

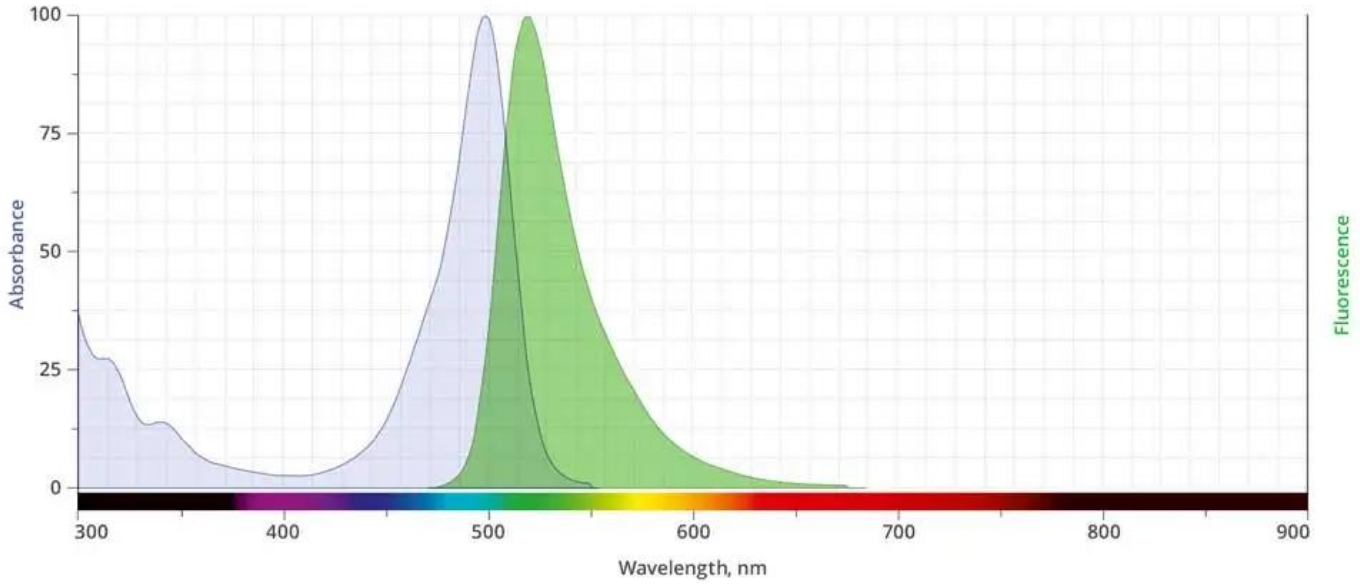
AZDye™ 488 is structurally identical to Alexa Fluor® 488. Its absorption/emission spectra is a perfect match to spectra of many other fluorescent dyes based on sulfonated rhodamine 110 core, including DyLight® 488, Alexa Fluor® 488, and CF® 488A.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	736.69 (protonated)
Appearance	Yellow solid
Extinction Coefficient	73
Unit Size	1 mg, 5 mg, 25 mg
Solubility	Water, DMSO, DMF
Storage Instructions	-20°C. Desiccate
Spectrally Similar Dyes	Fluorescein, Alexa Fluor® 488, CF® 488A, DyLight® 488, Atto™ 488
Excitation/Emission Maximum	494/517 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

ABS/EM SPECTRA

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SELECTED REFERENCES

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2. Ratnayeke, N., *et al.* (2021). Cdt1 inhibits CMG helicase in early S phase to separate origin licensing from DNA synthesis. *bioRxiv*, **e-print**. [bioRxiv]
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4. Morral, C., *et al.* (2020). Protocol for Efficient Protein Synthesis Detection by Click Chemistry in Colorectal Cancer Patient-Derived Organoids Grown In Vitro. *STAR Protocols*, **Volume 1, 2** [ScienceDirect]
5. Uchiyama, J., *et al.* (2020). Quantitative nascent proteome profiling by dual pulse labeling with O-propargyl-puromycin and stable isotope labeled amino acids. *The Journal of Biochemistry*, **10**, 1093. [Oxford Academic]
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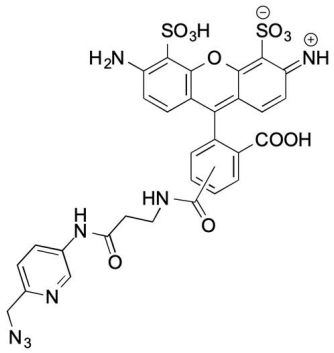
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DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

GALLERY IMAGES



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