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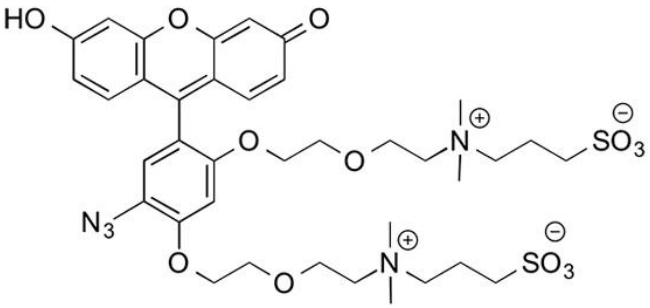
CALFLUOR 488 AZIDE

SKU: CCT-1369



DESCRIPTION

A major shortcoming of the visualization of alkyne-tagged biomolecules with fluorescent azide probes through CuAAC is the need to remove unreacted fluorescent probes. This is particularly problematic when imaging the intracellular environment, tissues of living organisms, or visualizing biomolecules in vivo. Failure to remove all unreacted fluorescent probes is also one of the major contributors to background signal and non-specific binding.

To overcome this shortcoming, Carolyn Bertozzi's group has designed fluorogenic azide probes that are activated by Cu-catalyzed or metal-free click chemistry. These azide probes are not fluorescent until they react with alkynes. Termed the CalFluors, these probes possess emission maxima that range from green to far-red wavelengths, and enable sensitive biomolecule detection under no-wash conditions. A number of reports show that CalFluor probes are an indispensable tool for sensitive visualization of metabolically labeled molecules (glycans, DNA, RNA, and proteins) in cells, developing zebrafish, and mouse brain tissue slices under no-wash conditions.

SPECIFICATIONS

CAS Number	1798305-98-2
Molecular Weight	835.94

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

Appearance	Yellow to orange amorphous solid
Unit Size	1 mg, 5 mg
Solubility	Water, DMSO
Storage Instructions	-20°C. Desiccate
Spectrally Similar Dyes	FAM, Alexa Fluor® 488, Atto™ 488, CF™ 488A dyes, DyLight™488
Excitation/Emission Maximum	500/521 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

DISCLAIMER

CalFluor Azide Probes are covered by U.S. Patent No.: 9,410,958.

This product may be used for research purposes only. It is not licensed for resale and may only be used by the buyer. This product may not be used and is not licensed for clinical assays, where the results of such assays are provided as a diagnostic service. If a diagnostic or therapeutic use is anticipated, then a license must be requested from the University of California. The availability of such diagnostic and therapeutic use license(s) cannot be guaranteed from the University of California.

SELECTED REFERENCES

1. Graham, A. J., *et al.* (2022). Extracellular Electron Transfer Enables Cellular Control of Cu(I)-Catalyzed Alkyne-Azide Cycloaddition. *ACS Cent Sci.*, **8 (2)**, 246-257. [PubMed]
2. Shieh P., *et al.* (2015). CalFluors: A Universal Motif for Fluorogenic Azide Probes across the Visible Spectrum*J. Am. Chem. Soc.,* **137**: 7145−51. [PubMed]
3. Pawlak, J. B., *et al.* (2016). The Optimization of Bioorthogonal Epitope Ligation within MHC-I Complexes. *ACS Chem. Biol.,* **11**: 3172−8. [PubMed]

DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

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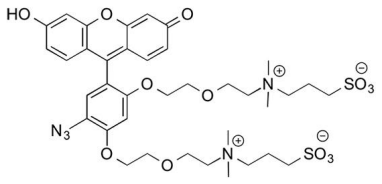
GALLERY IMAGES



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