

CALFLUOR 555 AZIDE

SKU: CCT-1370

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

Unit Size 1 mg, 5 mg **Abs/Em Maxima, triazole after click reaction** 561/583 nm

Spectrally similar dyes

Alexa Fluor® 555, CF® 555, DyLight®

549, Cy3 Dye

Molecular weight 891.09

For research use only. Not intended for animal or human therapeutic or diagnostic use.





CAS N/A

Solubility Water, DMSO **Purity** >95% (HPLC)

Appearance Dark red amorphous solid

Storage Conditions -20°C. Desiccate

Shipping Conditions Ambient temperature

Disclaimer

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

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