

5-TAMRA PICOLYL AZIDE

SKU: CCT-1254



Description

AZDye[™] 594 Picolyl Azide is an advanced fluorescent probe that incorporates a copperchelating 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.

5-TAMRA (also known as TAMRA, isomer 5) is the red-fluorescent probe that is compatible with various excitation sources including mercury arc, tungsten and xenon arc lamps, the 544 nm line of the Helium-Neon laser and the 532 nm green laser line.

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





Abs/Em Spectra

Specifications

Unit Size	1 mg, 5 mg, 25 mg
Abs/Em Maxima	553/575 nm
Extinction Coefficient	91,000
Spectrally Similar Dyes	Alexa Fluor® 546, Atto [™] 543, CF® 543 Dye
Molecular weight	808.89
CAS	N/A
Solubility	DMSO, DMF
Purity	>95% (HPLC)
Appearance	Dark red amorphous solid
Storage Conditions	-20°C. Desiccate
Shipping Conditions	Ambient temperature

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