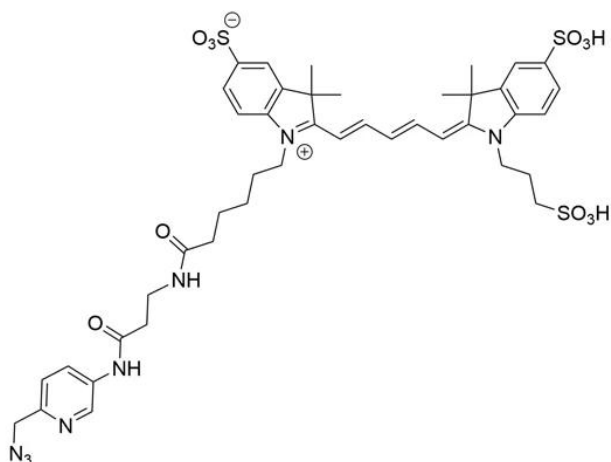


CY5 PICOLYL AZIDE

SKU: CCT-1177



Description

Cy5 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 biomolecules. This will be of special value for the detection of low abundance targets or living system imaging.

Cy5 Picolyl Azide is a water-soluble, pH-insensitive from pH 4 to pH 10, far-red-fluorescent probe with excitation ideally suited for the 633 nm or 647 nm laser lines. Cy5 dye is structurally similar, and spectrally is almost identical to Alexa Fluor® 647, CF® 647 Dye, or any other Cyanine5 based fluorescent dyes.

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

Specifications

Unit Size	1 mg, 5 mg, 25 mg
Abs/Em Maxima	647/663 nm
Extinction Coefficient	250,000
Flow Cytometry Laser Line	633 nm or 647 nm
Microscopy Laser Line	633 nm or 647 nm
Spectrally Similar Dyes	Alexa Fluor® 647, CF® 647, DyLight® 649
Molecular weight	953.15 (protonated)
CAS	N/A
Solubility	Water, DMSO, DMF
Purity	>95% (HPLC)
Appearance	Blue solid
Storage Conditions	-20°C. Desiccate
Shipping Conditions	Ambient temperature

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