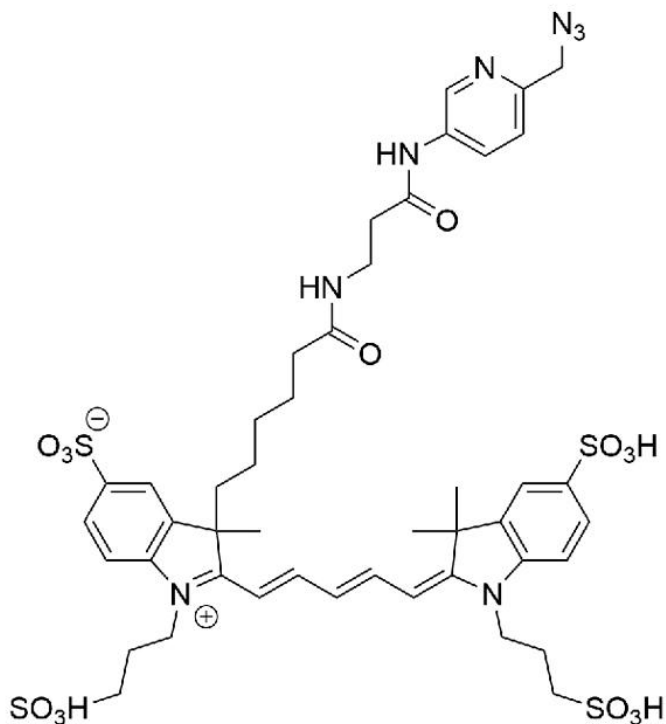


# AZDYE 647 PICOLYL AZIDE

SKU: CCT-1300



## Description

AZDye™ 647 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).

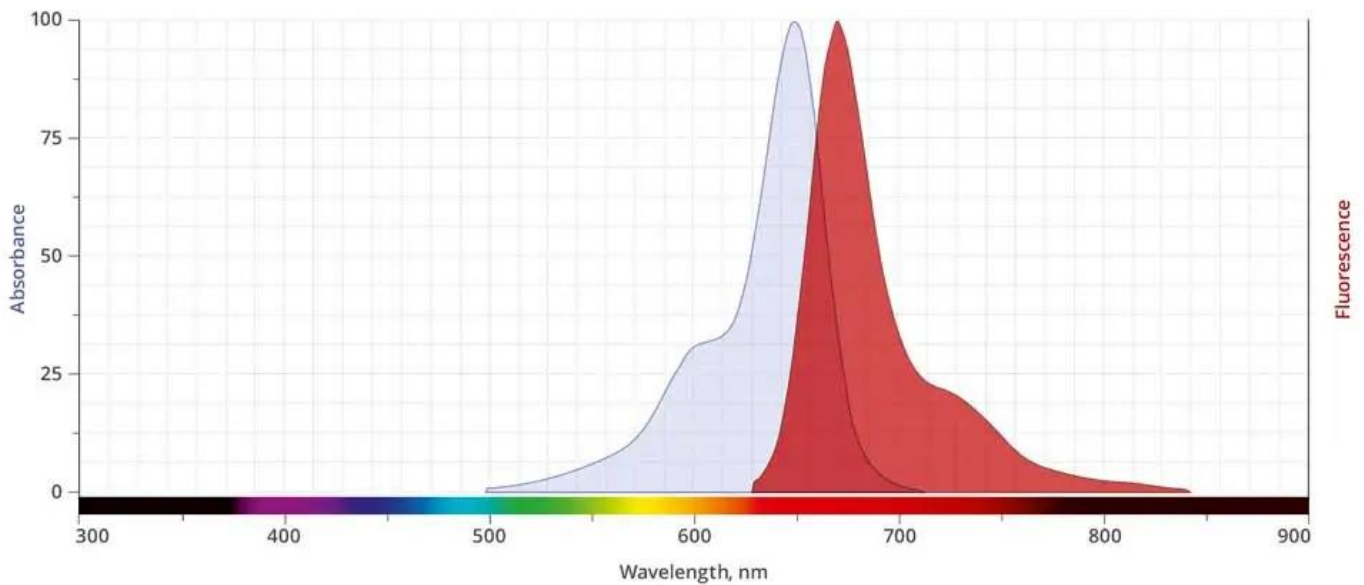
In addition, the use picolyl azides instead of conventional azides allows for at least a tenfold reduction in the concentration of the copper catalyst without sacrificing the efficiency of labeling, significantly improving biocompatibility of CuAAC labeling protocol.

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

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system imaging.

AZDye™ 647 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. AZDye™ 647 is structurally similar to Alexa Fluor® 647, and spectrally is almost identical to Cy5 Dye, Alexa Fluor® 647, CF® 647 Dye, or any other Cyanine5 based fluorescent dyes.



Abs/Em Spectra

## Specifications

<b>Unit Size</b>	1 mg, 5 mg, 25 mg
<b>Abs/Em Maxima</b>	648/671 nm
<b>Extinction Coefficient</b>	270,000
<b>Flow Cytometry Laser Line</b>	633 nm or 647 nm
<b>Microscopy Laser Line</b>	633 nm or 647 nm
<b>Spectrally Similar Dyes</b>	Alexa Fluor® 647, CF® 647, DyLight® 649
<b>Molecular weight</b>	1061.21 (protonated)
<b>CAS</b>	N/A
<b>Solubility</b>	Water, DMSO, DMF
<b>Purity</b>	>95% (HPLC)
<b>Appearance</b>	Blue solid
<b>Storage Conditions</b>	-20°C. Desiccate

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**Shipping Conditions**    Ambient temperature

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