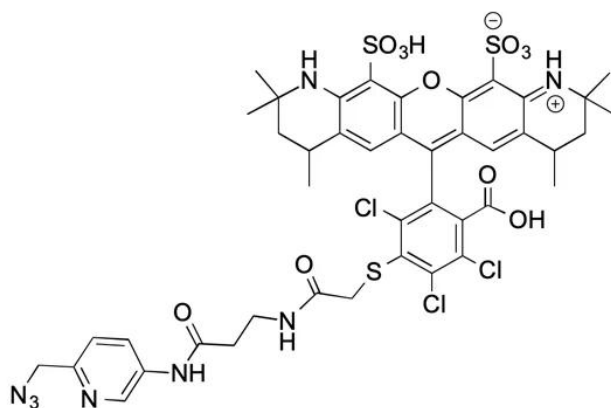


# AZDYE 546 PICOLYL AZIDE

**SKU:** CCT-1284



## Description

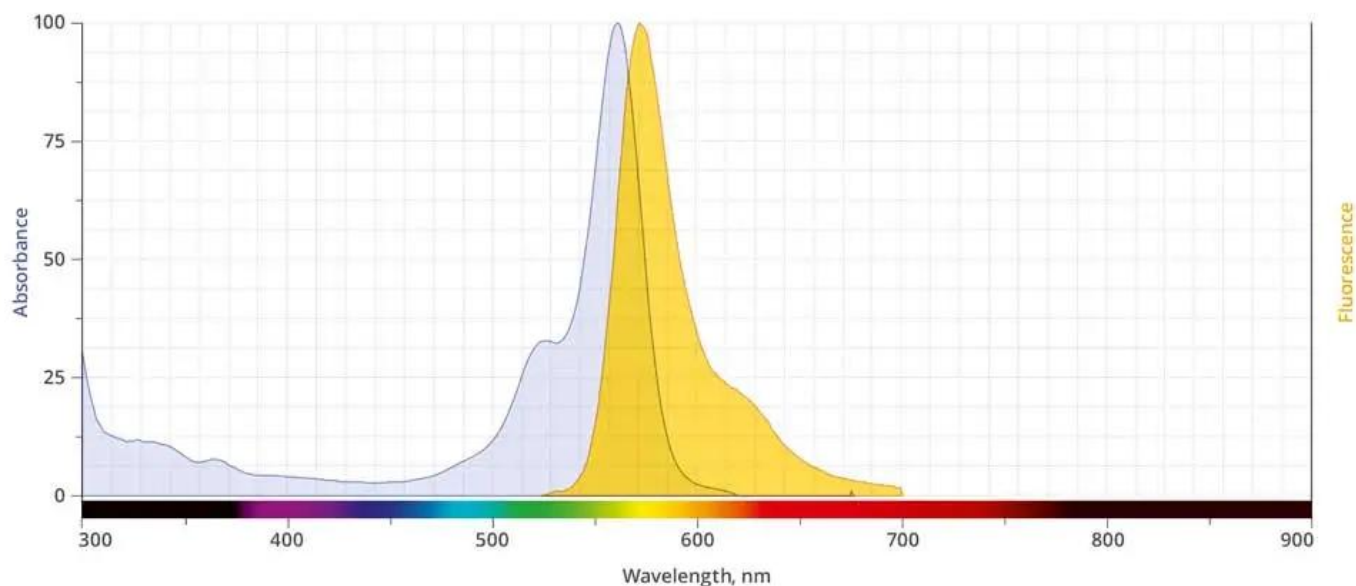
AZDye™ 546 Picolyl Azide is an advanced fluorescent probe that incorporates a copper-chelating motif to raise the effective concentration of Cu(I) at the reaction site to boost the efficiency of the CuAAC reaction, resulting in a faster and more biocompatible CuAAC labeling. Up to 40-fold increase of 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.

AZDye™ 546 is water-soluble, and pH-insensitive from pH 4 to pH 10 orange-fluorescent dye with absorption and emission maxima at 554 and 570 nm, respectively. It can be used with the 488 nm and 532 nm laser lines. AZDye™ 546 dye conjugated to a variety of antibodies, peptides, proteins, tracers, and amplification substrates often used for generation of stable signal in imaging and flow cytometry.

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



Abs/Em Spectra

## Specifications

<b>Unit Size</b>	1 mg, 5 mg, 25 mg
<b>Abs/Em Maxima</b>	554/570 nm
<b>Extinction Coefficient</b>	110,000
<b>Flow Cytometry Laser Line</b>	532 nm
<b>Microscopy Laser Line</b>	543 nm or 546 nm
<b>Spectrally Similar Dyes</b>	Alexa Fluor® 546, Atto™ 546, CF® 546
<b>Molecular weight</b>	1050.39 (protonated)
<b>CAS</b>	N/A
<b>Solubility</b>	Water, DMSO, DMF
<b>Purity</b>	>95% (HPLC)
<b>Appearance</b>	Red solid
<b>Storage Conditions</b>	-20°C. Desiccate
<b>Shipping Conditions</b>	Ambient temperature

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