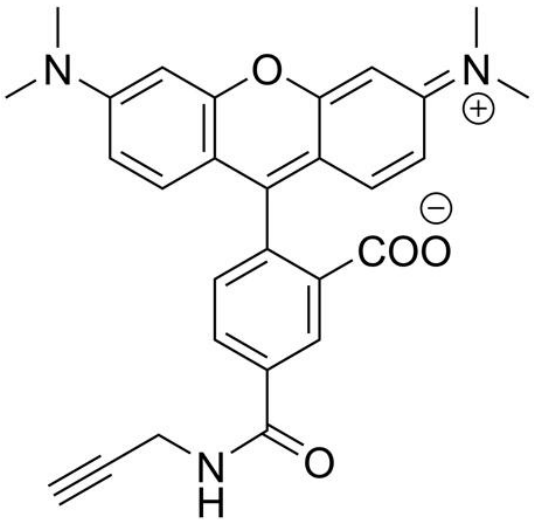
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

5-TAMRA ALKYNE

SKU: CCT-1255



DESCRIPTION

5-TAMRA Alkyne (also known as TAMRA Alkyne, 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. It is predominantly used for detection of terminal alkyne-tagged biomolecules via a copper-catalyzed click reaction (CUAAC). It also reacts with strained cyclooctyne via a copper-free “click chemistry” reaction to form a stable triazole and does not require Cu-catalyst or elevated temperatures.

Although the mixed isomers of 5(6)-TAMRA Alkyne is a preferred, routinely used red fluorescent dye for staining proteins, labeling peptides and nucleotides with TAMRA mixed isomers might be troublesome due to significant signal broadening in HPLC purification. Peptides and nucleotides

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

labeled with a single isomer TAMRA usually give better resolution in HPLC purification that is often required in the conjugation processes.

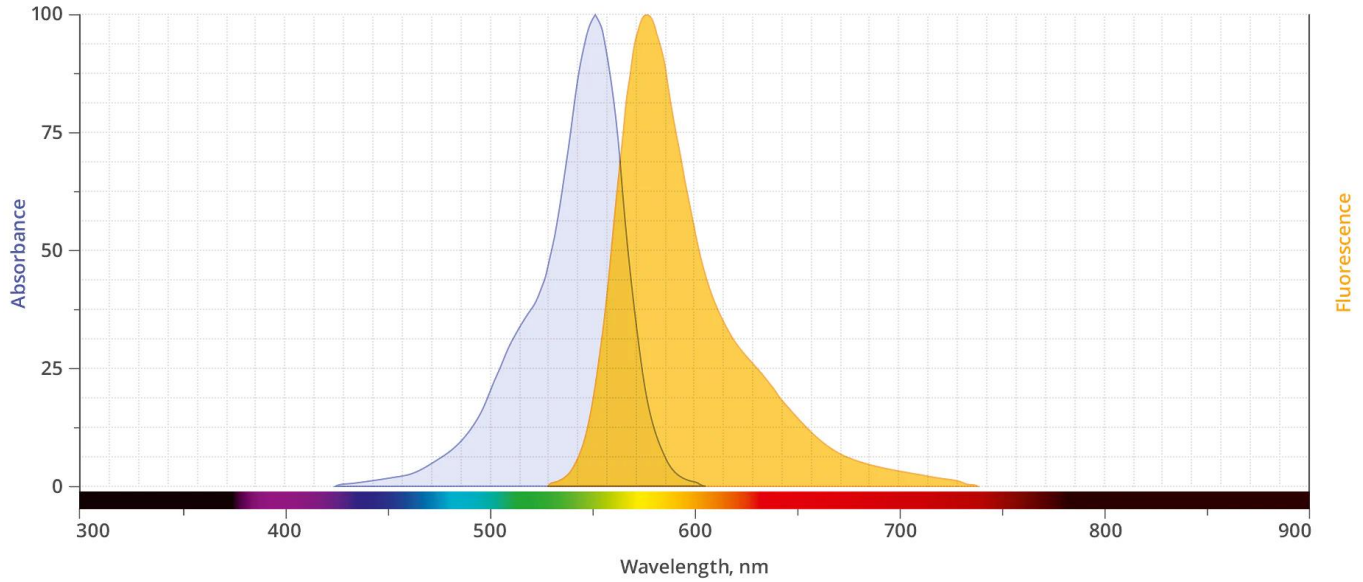
5-TAMRA Alkyne is structurally identical to Tetramethylrhodamine (TAMRA) Alkyne (5-Carboxytetramethylrhodamine, Propargylamide), 5-isomer ,Catalog number: T10183.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	467.52
Appearance	Dark red amorphous solid
Extinction Coefficient	89,000
Purity	>95% (HPLC)
Unit Size	1 mg, 5 mg, 25 mg, 100 mg
Solubility	DMSO, DMF
Storage Instructions	-20°C. Desiccate
Spectrally Similar Dyes	Alexa Fluor® 546, Atto™ 543, CF® 543 Dye
Excitation/Emission Maximum	553/575 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

ABS/EM SPECTRA

www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600



SELECTED REFERENCES

1. Kang, D., *et al.* (2021). Bioorthogonal Retro-Cope Elimination Reaction of N, N-Dialkylhydroxylamines and Strained Alkynes. *J Am Chem Soc.*, **143 (15)**, 5616-5621. [PubMed]
2. Ranzinger, R., *et al.* (2020). Mass Spectrometric Method for the Unambiguous Profiling of Cellular Dynamic Glycosylation. *ACS Chem. Biol.*, **15, 10**, 2692-2701. [ACSPublications]

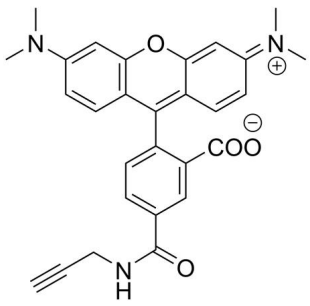
DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

GALLERY IMAGES

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.