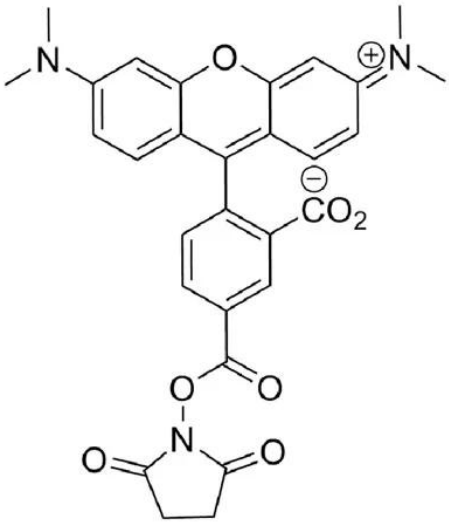
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

# 5-TAMRA NHS ESTER

**SKU:** FP-1255



## Description


5-TAMRA NHS Ester (5-Carboxytetramethylrhodamine) is a bright orange-fluorescent dye with excitation ideally suited to the 532 nm or 546 nm laser lines. This dye is supplied purified single isomer 5. 5-TAMRA NHS Ester has been used widely for preparing peptide, protein, nucleotide and nucleic acid conjugates, especially fluorescent antibodies and avidin derivatives used in immunochemistry. The absorbance and emission maxima of TAMRA conjugates are 553 nm and 575 nm respectively.

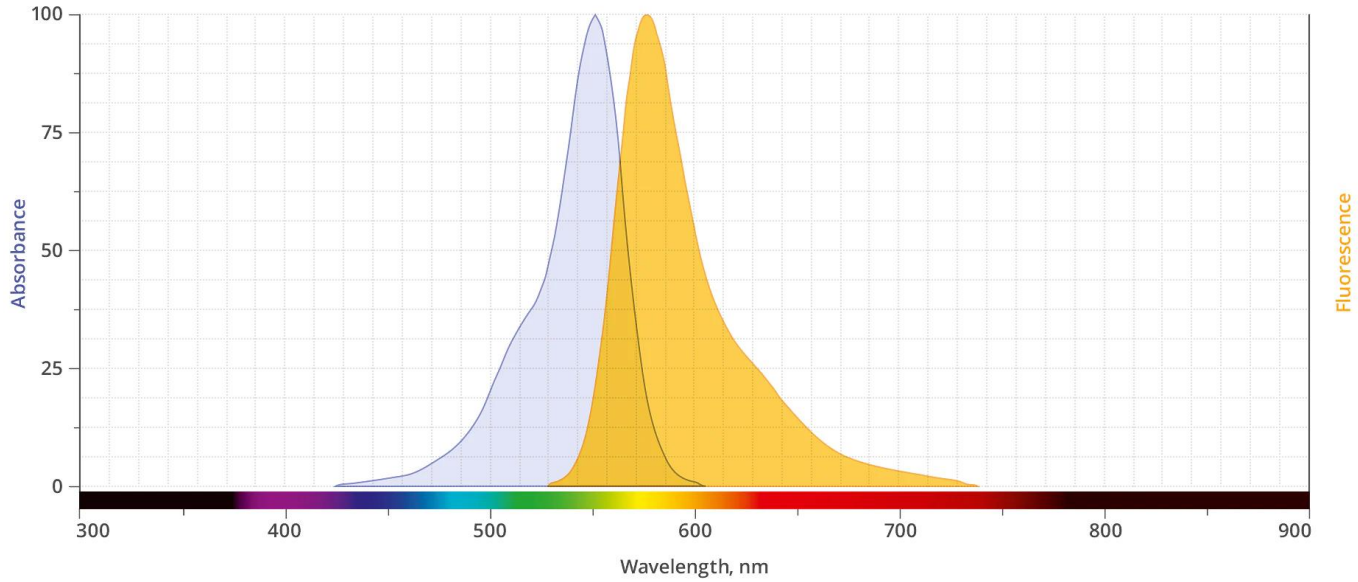
**For research use only. Not intended for therapeutic or diagnostic use in animals or humans.**

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

5-TAMRA is more often used for labeling peptides and proteins. 6-TAMRA is predominately used for labeling nucleotides and sequencing nucleic acids. 5-TAMRA dye is a bright fluorescent label 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.

The NHS Ester reacts specifically and efficiently with a primary amine (e.g., side chain of lysine residues or aminosilane-coated surfaces) at pH 7-9 to form a stable, covalent amide bond. The NHS ester (or succinimidyl ester) is the most popular tool for conjugating dyes to the primary amines of protein or antibody (Lys), amine-modified oligonucleotides, and other amine-containing molecules.

## Abs/Em Spectra




## Specifications

| | |
|---|---|
| **Unit Size** | 25 mg, 100 mg, 1000 mg |
| **Reactivity** | Primary amines |
| **Abs/Em Maxima** | 553/575 nm |
| **Extinction coefficient** | 92,000 cm-1M-1 |
| **Solubility** | DMSO, DMF, MeOH |
| **Spectrally similar dyes** | Alexa Fluor® 546, TAMRA, CF™ 543, MB™ 543 |
| **Molecular weight** | 527.53 |
| **Storage Conditions** | -20°C. |

**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

**Shipping Conditions** Ambient temperature

---