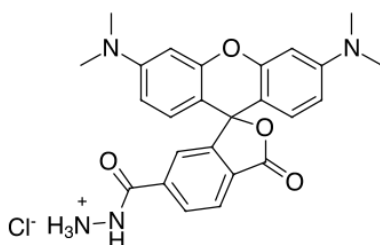


TAMRA hydrazide, 6-isomer

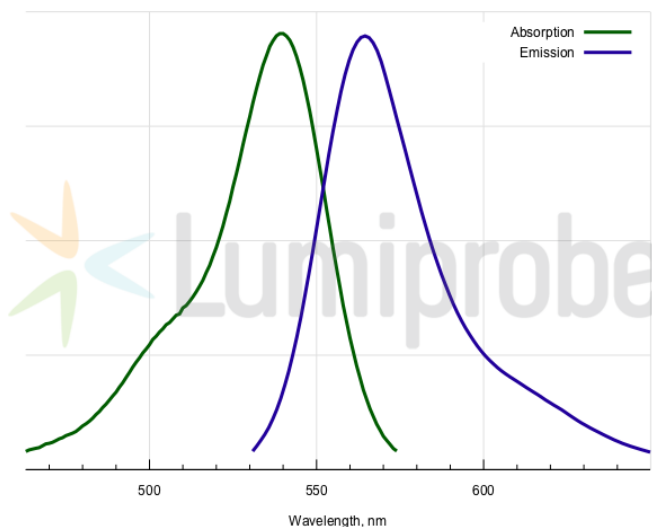
<http://www.lumiprobe.com/p/tamra-hydrazide-6>

Dye hydrazides are useful for the labeling of carbonyl compounds like aldehydes and ketones. Many sugars can be converted to carbonyl compounds by periodate oxidation.

Tetramethylrhodamine (TAMRA) is a xanthene fluorophore. This derivative is a pure 5-isomer of TAMRA bearing hydrazide group for the coupling with carbonyl compounds.



Structure of 6-TAMRA hydrazide



Absorption and emission spectra of 6-TAMRA

General properties

| | |
|-------------------------|---|
| Appearance: | dark colored solid |
| Mass spec M+ increment: | 426.2 |
| Molecular weight: | 480.94 |
| Molecular formula: | C ₂₅ H ₂₅ N ₄ ClO ₄ |
| Solubility: | good in DMF, DMSO, alcohols |
| Quality control: | NMR ¹ H, HPLC-MS (95%) |
| Storage conditions: | Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate. |

Spectral properties

| | |
|--|-------|
| Excitation/absorption maximum, nm: | 541 |
| ε, L·mol ⁻¹ ·cm ⁻¹ : | 84000 |
| Emission maximum, nm: | 567 |
| Fluorescence quantum yield: | 0.1 |
| CF ₂₆₀ : | 0.32 |
| CF ₂₈₀ : | 0.19 |