

## **Lumiprobe Corporation**

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

USA

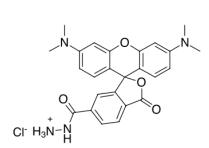
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

## TAMRA hydrazide, 6-isomer

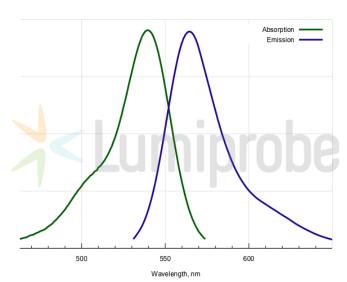
http://www.lumiprobe.com/p/tamra-hydrazide-6

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:  $C_{25}H_{25}N_4ClO_4$ 

Solubility: good in DMF, DMSO, alcohols Quality control: NMR <sup>1</sup>H, HPLC-MS (95%)

Storage conditions: Storage: 24 months after receival 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  $\epsilon$ , L·mol $^{-1}$ ·cm $^{-1}$ : 84000 Emission maximum, nm: 567 Fluorescence quantum yield: 0.1  $CF_{260}$ : 0.32  $CF_{280}$ : 0.19