

Product Data Sheet

Date of Issue: 8 Oct 2021

1. Product Information

- Product Name : TAMRA Thiol
- Catalog Number : KWT1057
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : Thiol
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{27}H_{29}N_3O_4S$
- Molecular Weight : 491.6 g/mol
- Excitation $_{Max}$: 551 ± 3 nm
- Emission $_{Max}$: 573 ± 4 nm
- Extinction Coefficient : $\geq 70,000$ /cm·M

3. Description

TAMRA Thiol is an inactive form of bright yellow dye that used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 551/573 nm, similar to that of DyLight 549, ATTO 550 and Cy 3. TAMRA might be excited using 543 or 546 nm laser line and displays good optical property. The thiol is attached to TAMRA fluorophore through an aminoethyl linkage. TAMRA thiol can be labeled to biomolecules through a disulfide bond formation with thiol of cysteine residue or can be utilized as a reference standard for dye-conjugates.