

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : TAMRA Maleimide
- Catalog Number : KWM1057
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : Maleimide
- Reactive Toward : Thiol
- Molecular Formula : $C_{31}H_{30}N_4O_6$
- Molecular Weight : 554.6 g/mol
- Excitation $_{Max}$: 553 ± 3 nm
- Emission $_{Max}$: 575 ± 4 nm
- Extinction Coefficient : $\geq 54,000$ /cm·M

3. Description

TAMRA Maleimide is a thiol reactive bright yellow dye that used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 543/575 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. Maleimides selectively label thiols of cysteine residue via 1,4-addition pathway, without interacting with amines, to form thioether linkage. Maleimides apparently do not react with methionine, histidine or tyrosine, but they might react with primary amines under strong basic environment. We offer TAMRA maleimide for labeling of antibodies, peptides, proteins and oligonucleotide labeling and automated DNA sequencing applications.