

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : TAMRA Hydrazide
- Catalog Number : KWH1025
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : Hydrazide
- Reactive Toward : Aldehyde, Ketone
- Molecular Formula : $C_{25}H_{26}N_4O_4$
- Molecular Weight : 446.5 g/mol
- Excitation_{Max} : 544 ± 3 nm
- Emission_{Max} : 576 ± 4 nm
- Extinction Coefficient : $\geq 83,000$ /cm·M

3. Description

TAMRA Hydrazide is a reactive form of bright yellow dye that used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 544/576 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. Hydrazides can label aldehyde and ketone through reductive amination reaction to form an imine linkage. The main labeling target for hydrazides is free reducing sugars on biomolecules, and prior to conjugation, primary and secondary alcohols on polysaccharide and glycoprotein are usually oxidized to aldehyde and ketone. We offer TAMRA hydrazide for labeling of polysaccharide, glycoprotein and other biomolecules bearing aldehyde or ketone.