

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : TAMRA NHS ester
- Catalog Number : KWS1025
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{30}H_{31}N_3O_7$
- Molecular Weight : 529.55 g/mol
- Excitation_{Max} : 553 ± 3 nm
- Emission_{Max} : 578 ± 4 nm
- Extinction Coefficient : $\geq 68,000$ /cm·M

3. Description

TAMRA NHS ester 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 553/578 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. NHS esters readily react with amine-modified oligonucleotides or amino groups of proteins, i.e. the ϵ -amino groups of lysine or the amine terminus of nucleotides to form a chemically stable amide bond between dye and the biomolecule. We offer TAMRA NHS ester for labeling of antibodies, peptides, proteins and oligonucleotide labeling and automated DNA sequencing applications.