

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : TAMRA Sulfo NHS ester
- Catalog Number : KWSN1025
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : Sulfo NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{29}H_{27}N_3O_{10}S$
- Molecular Weight : 609.6 g/mol
- Excitation_{Max} : 554 ± 3 nm
- Emission_{Max} : 583 ± 4 nm
- Extinction Coefficient : $\geq 60,000$ /cm·M

3. Description

TAMRA Sulfo-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 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. Sulfo-NHS esters have higher water solubility than NHS esters, thus they do not need organic co-solvent and 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 stable amide bond between dye and the biomolecule. We offer TAMRA Sulfo-NHS ester for labeling of antibodies, peptides, proteins and oligonucleotide labeling and automated DNA sequencing applications.