

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : TAMRA Vinylsulfone
- Catalog Number : KWA1020
- Packing Unit : 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at 4 °C

2. Additional Information

- Fluorophore Label : TAMRA
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{29}H_{31}N_3O_6S$
- Molecular Weight : 549.64 g/mol
- Excitation_{Max} : 553 ± 3 nm
- Emission_{Max} : 575 ± 4 nm
- Extinction Coefficient : $\geq 54,000$ /cm·M

3. Description

TAMRA Vinylsulfone is pH insensitive reactive form of bright yellow dye that used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 553/575 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. Vinylsulfone reactive group, developed by BioActs' leading technology, is stable in a wide range of pH and at the high temperature. Vinylsulfones readily react with primary amines of amino-modified oligonucleotides or of proteins to form a stable amino linkage between dye and the biomolecule. We offer TAMRA vinylsulfone for labeling of antibodies, peptides, proteins and oligonucleotide labeling and automated DNA sequencing applications.