

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma®581 Thiol
- Catalog Number : KWT1415
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Purple Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 581
- Reactive Group : Thiol
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 978.2 g/mol
- Excitation_{Max} : 578 ± 3 nm
- Emission_{Max} : 593 ± 4 nm
- Extinction Coefficient : ≥ 107,000 /cm·M

3. Description

Flamma® Fluors 581 Thiol is inactive form of bright orange fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. The thiol is attached to Flamma 581 fluorophore through a spacer. The maxima of Ex/Em values are at 578/593 nm, similar to that of Alexa 594 and DyLight 594. Flamma 581 might be excited using 561, 568 or 578 nm laser lines and displays excellent optical property. Flamma® Fluors 581 thiol can be labeled to biomolecules through a disulfide bond formation with thiol of cysteine residue or can be utilized as a reference standard for dye-conjugates.