

Product Data Sheet

Date of Issue: 26 Nov 2019

1. Product Information

- Product Name : Flamma® 581 Isothiocyanate
- Catalog Number : PWI1415
- 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 : Isothiocyanate
- Reactive Toward : Reactive Toward: Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 1003.21 g/mol
- Excitation_{Max} : 578 ± 3 nm
- Emission_{Max} : 593 ± 4 nm
- Extinction Coefficient : ≥ 109,000 /cm·M

3. Description

Flamma® Fluors 581 Isothiocyanate is a reactive form of orange fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. 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. Isothiocyanates are moderately reactive but quite stable in water and most organic solvents. Isothiocyanates react to primary amine to form reasonably stable thiourea linkage. Whereas labeling of protein with NHS esters can typically be done at pH 8.3, conjugation for isothiocyanates usually require pH above 9. We offer Flamma Fluors 581 isothiocyanate for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection