

Product Data Sheet

Date of Issue: 5 Oct 2021

1. Product Information

- Product Name : Flamma® 581 NHS ester
- Catalog Number : PWS1415
- 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 : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 1016.13 g/mol
- Excitation_{Max} : 578 ± 3 nm
- Emission_{Max} : 593 ± 4 nm
- Extinction Coefficient : ≥ 83,000 /cm·M

3. Description

Flamma® Fluors 581 NHS ester 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 the 561, 568 or 578 nm laser lines and displays excellent optical property. Flamma 581 dyes can be conjugated to low-abundance biomolecules with great sensitivity and high molar ratios, allowing sensitive detection. 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 Flamma Fluors 581 dye for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection.