

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

• Product Name : Flamma® 581 PEG4-Alkyne

· Catalog Number : KWG1415

• 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 : PEG4-Alkyne

· Reactive Toward: Azide

· Molecular Weight: 1132.34 g/mol

• Excitation $_{\text{Max}}$: 578 ± 3 nm

• Emission Max: $593 \pm 4 \text{ nm}$

• Extinction Coefficient : $\geq 93,000 / \text{cm} \cdot \text{M}$

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.