

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} :	$578 \pm 3 \text{ nm}$
• Emission _{Max} :	$593 \pm 4 \text{ nm}$
• Extinction Coefficient :	$\geq 107,000 \ /cm \cdot M$

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.

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. MATERIAL SAFETY DATA: Review the complete Material Safety Data Sheet before use Material Safety Data Sheet (MSDS), Certificate of Analysis (COA) and Technical Information are available at http://www.bioacts.com or upon request.