

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 675 Thiol
- Catalog Number : PWT1415
- Packing Unit : 1mg / 5mg / 25 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 675
- Reactive Group : Thiol
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{45}H_{53}N_3O_{13}S_5$
- Molecular Weight : 1004 g/mol
- Excitation $_{Max}$: 675 ± 3 nm
- Emission $_{Max}$: 691 ± 4 nm
- Extinction Coefficient : $\geq 200,000$ /cm·M

3. Description

Flamma® Fluors 675 Thiol is inactive form of near infrared (NIR) fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. The thiol is attached to Flamma 675 fluorophore through a spacer. The maxima of Ex/Em values are at 675/691 nm, similar to that of Alexa 680, Cy5.5, IRDye 680LT and DyLight 680. Flamma 675 might be excited using 633 nm laser line and the emission occurs at biological tissue permeable NIR region. Flamma® Fluors 675 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.