

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 749 Thiol
- Catalog Number : PWT1215
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 749
- Reactive Group : Thiol
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{39}H_{53}N_3O_7S_3$
- Molecular Weight : 770.03 g/mol
- Excitation $_{Max}$: 749 ± 3 nm
- Emission $_{Max}$: 774 ± 4 nm
- Extinction Coefficient : $\geq 150,000$ /cm·M

3. Description

Flamma® Fluors 749 Thiol is inactive form of near infrared (NIR) fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. The thiol is attached to Flamma 749 fluorophore through a spacer. The maxima of Ex/Em values are at 749/774 nm, similar to that of Alexa 750, Cy7, IRDye 750 and DyLight 755. Flamma 749 might be excited using 750 nm laser line or dye-pumped laser excitation and the emission occurs at biological tissue permeable NIR region. Flamma® Fluors 749 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.