

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 749 Isothiocyanate
- Catalog Number : PWI1308
- 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 : Isothiocyanate
- Molecular Weight : 795.04 g/mol
- Excitation_{Max} : 749 ± 3 nm
- Emission_{Max} : 774 ± 4 nm
- Extinction Coefficient : ≥ 200,000 /cm·M

3. Description

Flamma® Fluors 749 Isothiocyanate is a reactive form of near infrared (NIR) fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. 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 749-conjugated primary and secondary antibody are used as molecular probes for in vitro imaging and other fluorescence detection methods. Isothiocyanates are moderately reactive but quite stable in water and most organic solvents. Isothiocyanates react to primary amine to form reasonably stable thiourea linkage. Whereas labeling of protein with NHS esters can typically be done at pH 8.3, conjugation for isothiocyanates usually require pH above 9. We offer Flamma Fluors 749 isothiocyanate for labeling of antibodies, peptides, proteins, ligands and in vivo NIR imaging.