

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 496 Isothiocyanate
- Catalog Number : PWI1001
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Yellow to Orange Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 496
- Reactive Group : Isothiocyanate
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 498.46 g/mol
- Excitation_{Max} : 496 ± 3 nm
- Emission_{Max} : 520 ± 4 nm
- Extinction Coefficient : ≥ 24,000 /cm·M

3. Description

Flamma® Fluors 496 Isothiocyanate is a reactive form of bright green dye induced from fluorescein structure and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 496/520 nm, similar to that of Alexa 488 and Fluorescein. Flamma 496 might be excited using 488 nm laser line and displays excellent optical property. 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 496 isothiocyanate for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection.