

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 496 Sulfo-NHS ester
- Catalog Number : CWSN1001
- 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 : Sulfo-NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{25}H_{15}F_2NO_{12}S$
- Molecular Weight : 591.45 g/mol
- Excitation_{Max} : 496 ± 3 nm
- Emission_{Max} : 520 ± 4 nm
- Extinction Coefficient : $\geq 63,000$ /cm·M

3. Description

Flamma® Fluors 496 Sulfo-NHS ester 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 496/516 nm, similar to that of Fluorescein. Flamma 496 might be excited using 488 nm laser line and displays excellent optical property. Flamma 496 can be conjugated to low-abundance biomolecules with great sensitivity and high molar ratios, allowing sensitive detection. Sulfo-NHS esters have higher water solubility than NHS esters, thus they do not need organic co-solvent and readily react with amine-modified oligonucleotides or amino groups of proteins, i.e. the ϵ -amino groups of lysine or the amine terminus of nucleotides to form a stable amide bond between dye and the biomolecule. We offer Flamma Fluors 496 Sulfo-NHS ester for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection.