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Product Data Sheet

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1. Product Information

- Product Name : Flamma® 496 Maleimide
- Catalog Number : CWM1001
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Yellow to Orange Solid
- Storage Conditions : Protect from Light at -20 ℃

2. Additional Information

- Fluorophore Label : Flamma® 496
- Reactive Group : Maleimide
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{27}H_{18}F_2N_2O_8$
- Molecular Weight : 536 g/mol
- Excitation $_{Max}$: 496 ± 3 nm
- Emission $_{Max}$: 520 ± 4 nm
- Extinction Coefficient : ≥ 63,000 /cm·M

3. Description

Flamma® Fluors 496 Maleimide is a thiol reactive 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 Alexa 488 and FAM. Flamma 496 might be excited using 488 nm laser line and displays excellent optical property. Flamma 496 maleimide can be conjugated to low-abundance of biomolecules with great sensitivity allowing sensitive detection. Maleimides selectively label thiols of cysteine residue via 1,4-addition pathway, without interacting with amines, to form thioether linkage. Maleimides apparently do not react with methionine, histidine or tyrosine, but they might react with primary amines under strong basic environment. BioActs offers Flamma® 496 maleimide for labeling of thiols on antibodies, peptides, proteins, ligands and amplification substrates optimized for cellular labeling and detection.