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Product Data Sheet

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1. Product Information

- Product Name : Flamma® 594 Vinylsulfone
- Catalog Number : KOA1001
- Packing Unit : 1mg / 5mg / 25 mg
- Appearance : Purple Solid
- Storage Conditions : Protect from Light at 4 ℃

2. Additional Information

- Fluorophore Label : Flamma® 594
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{45}H_{63}N_3O_{11}S_2^-$
- Molecular Weight : 839.95 g/mol
- Excitation $_{Max}$: 590 ± 3 nm
- Emission $_{Max}$: 617 ± 4 nm
- Extinction Coefficient : ≥ 83,000 /cm·M

3. Description

Flamma® Fluors 594 Vinylsulfone is pH insensitive reactive form of brown dye that used to generate a stable fluorescence signal in bioimaging. Vinylsulfone reactive group, developed by BioActs' leading technology, is stable in a wide range of pH and at the high temperature. The maxima of Ex/Em values are at 590/617 nm, similar to that of Alexa 594 and DyLight 594. Flamma 594 might be excited using 578 nm laser line and displays excellent optical property. Flamma 594 can be conjugated to low-abundance of biomolecules with great sensitivity and high d/P ratio, enabling sensitive detection. Vinylsulfones readily react with primary amines of amino-modified oligonucleotides or of proteins to form a stable amino linkage between dye and the biomolecule. We offer Flamma 594 Vinylsulfone for labeling of antibodies, peptides, proteins, ligands and amplification substrates optimized for cellular labeling and detection.