

Product Data Sheet

Date of Issue: 22 Feb 2019

1. Product Information

- Product Name : Flamma® 675 Vinylsulfone
- Catalog Number : PWA1515
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at 4 °C

2. Additional Information

- Fluorophore Label : Flamma® 675
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{47}H_{55}N_3O_{15}S_5$
- Molecular Weight : 1062 g/mol
- Excitation $_{Max}$: 675 ± 3 nm
- Emission $_{Max}$: 691 ± 4 nm
- Extinction Coefficient : $\geq 200,000 / \text{cm} \cdot \text{M}$

3. Description

Flamma® Fluors 675 Vinylsulfone is pH insensitive reactive form of near infrared (NIR) fluorescent dye induced from benzindocyanine structure and 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 675/691 nm, similar to that of Alexa 680, Cy5.5, IRDye 680LT and DyLight 680. Flamma 675 might be excited using 633 nm laser line and the emission occurs at biological tissue permeable NIR region. 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 Fluors Vinylsulfone 675 for labeling of antibodies, peptides, proteins, ligands and amplification substrates optimized for in vitro imaging.