

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 675 Carboxylic acid
- Catalog Number : PWC1501
- 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 : Carboxylic acid
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{43}H_{48}N_2O_{14}S_4$
- Molecular Weight : 945.11 g/mol
- Excitation $_{Max}$: 675 ± 3 nm
- Emission $_{Max}$: 691 ± 4 nm
- Extinction Coefficient : $\geq 200,000$ /cm·M

3. Description

Flamma® Fluors 675 Carboxylic acid is inactive form of near infrared (NIR) fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. Flamma 675 fluorophore is attached with the octanoic acid. 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. Flamma 675 acid might be coupled with primary amine at small molecules or on biomolecules by standard amide bond coupling conditions, or it might be converted to a reactive amine form by using standard chemical techniques. Flamma® Fluors 675 acid can be utilized as a reference standard for dye-conjugates.