

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 675 Hydrazide
- Catalog Number : PWH1515
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 675
- Reactive Group : Hydrazide
- Reactive Toward : Aldehyde, Ketone
- Molecular Formula : $C_{43}H_{50}N_4O_{13}S_4$
- Molecular Weight : 959.14 g/mol
- Excitation_{Max} : 675 ± 3 nm
- Emission_{Max} : 691 ± 4 nm
- Extinction Coefficient : $\geq 200,000$ /cm·M

3. Description

Flamma® Fluors 675 Hydrazide is a reactive form of near infrared (NIR) fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. 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. Hydrazides can label aldehyde and ketone through reductive amination reaction to form an imine linkage. The main labeling target for hydrazides is free reducing sugars on biomolecules, and prior to conjugation, primary and secondary alcohols on polysaccharide and glycoprotein are usually oxidized to aldehyde and ketone. We offer Flamma Fluors 675 hydrazide for labeling of polysaccharide, glycoprotein and other biomolecules bearing aldehyde or ketone.