

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 648 Hydrazide
- Catalog Number : PWH1215
- 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® 648
- Reactive Group : Hydrazide
- Reactive Toward : Aldehyde, Ketone
- Molecular Formula : $C_{35}H_{46}N_4O_7S_2$
- Molecular Weight : 698.89 g/mol
- Excitation_{Max} : 648 ± 3 nm
- Emission_{Max} : 663 ± 4 nm
- Extinction Coefficient : $\geq 200,000$ /cm·M

3. Description

Flamma® Fluors 648 Hydrazide is a reactive form of far-red fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 648/663 nm, similar to that of Alexa 647, Cy5 and DyLight 650. Flamma 648 might be excited using 593 or 633 nm laser lines and displays excellent optical property. 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 648 hydrazide for labeling of polysaccharide, glycoprotein and other biomolecules bearing aldehyde or ketone.