

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 648 Carboxylic acid
- Catalog Number : PWC1201
- 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® 648
- Reactive Group : Carboxylic acid
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{35}H_{44}N_2O_8S_2$
- Molecular Weight : 684.86 g/mol
- Excitation $_{Max}$: 648 ± 3 nm
- Emission $_{Max}$: 663 ± 4 nm
- Extinction Coefficient : $\geq 227,000$ /cm·M

3. Description

Flamma® Fluors 648 Carboxylic acid is inactive form of far-red fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. Flamma 648 fluorophore is attached with the octanoic acid. 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. Flamma 648 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 648 acid can be utilized as a reference standard for dye-conjugates.