

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : ICG Hydrazide
- Catalog Number : POH1616
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20°C

2. Additional Information

- Fluorophore Label : ICG Hydrazide
- Reactive Group : Hydrazide
- Reactive Toward : Aldehyde, Ketone
- Molecular Weight : 744.98 g/mol
- Excitation_{Max} : 785 ± 3 nm
- Emission_{Max} : 812 ± 4 nm
- Extinction Coefficient : ≥ 100,000 /cm·M

3. Description

ICG Hydrazide is a carbonyl group-reactive near infrared (NIR) fluorescent dye and used to generate a stable fluorescence signal in bioimaging. NIR fluorescence allows to observe the deep image from the surface of skin and being utilized in a wide range of research fields. The maxima of Ex/Em values are at 785/821 nm. ICG might be excited using 750-800 nm laser line or LED 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 are 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 ICG hydrazide for labeling of polysaccharide, glycoprotein and other biomolecules bearing aldehyde or ketone.