

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : ICG Carboxylic acid
- Catalog Number : POC1616
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : ICG
- Reactive Group : Carboxylic acid
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula :  $C_{45}H_{50}N_2O_5S$
- Molecular Weight : 730.95 g/mol
- Excitation  $_{Max}$  :  $785 \pm 3$  nm
- Emission  $_{Max}$  :  $811 \pm 4$  nm
- Extinction Coefficient :  $\geq 218,000$  /cm·M

## 3. Description

ICG Carboxylic acid is an inactive form of near infrared (NIR) fluorescent dye and used to generate a stable fluorescence signal in bioimaging. A hexanoic acid is attached to ICG fluorophore. 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. ICG carboxylic acid can be coupled with primary amines at small molecules or on biomolecules by standard amide bond coupling conditions or can be utilized as a reference standard for dye-conjugates.