

Product Data Sheet

Date of Issue: 22 Feb 2019

1. Product Information

- Product Name : ICG NHS ester
- Catalog Number : POS1604
- 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
- Reactive Group : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{49}H_{53}N_3O_7S$
- Molecular Weight : 828.03 g/mol
- Excitation $_{Max}$: 785 ± 3 nm
- Emission $_{Max}$: 811 ± 4 nm
- Extinction Coefficient : $\geq 218,000$ /cm·M

3. Description

ICG NHS ester is an amine-reactive form of 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 785/811 nm. ICG might be excited using 750-800 nm laser line or LED and displays excellent optical property. NHS esters readily react with amine-modified oligonucleotides or amino groups of proteins, i.e. the ϵ -amino groups of lysine or the amine terminus of nucleotides to form a chemically stable amide bond between dye and the biomolecule. We offer ICG NHS ester for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and NIR imaging.