

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : ICG Sulfo-NHS ester
- Catalog Number : POSN1604
- 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 : Sulfo-NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{49}H_{53}N_3O_{10}S_2$
- Molecular Weight : 908.09 g/mol
- Excitation $_{Max}$: 785 ± 3 nm
- Emission $_{Max}$: 812 ± 4 nm
- Extinction Coefficient : $\geq 176,000$ /cm·M

3. Description

ICG Sulfo-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 785/821 nm. ICG might be excited using 750-800 nm laser line or LED and displays excellent optical property. Sulfo-NHS esters have higher water solubility than NHS esters, thus they do not need organic co-solvent and 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 stable amide bond between dye and the biomolecule. We offer ICG Sulfo-NHS ester for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and NIR imaging.