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Product Data Sheet

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1. Product Information

- Product Name : ICG Alkyne
- Catalog Number : POK1616
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20 ℃

2. Additional Information

- Fluorophore Label : ICG
- Reactive Group : Alkyne
- Reactive Toward : Azide
- Molecular Formula : $C_{48}H_{53}N_3O_4S$
- Molecular Weight : 768.02 g/mol
- Excitation $_{Max}$: 785 ± 3 nm
- Emission $_{Max}$: 812 ± 4 nm
- Extinction Coefficient : ≥ 170,000 /cm·M

3. Description

ICG Alkyne is a copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reagent 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. ICG alkyne couples with an azide to form 1,4-disubstituted 1,2,3-triazole inside of living systems without interfering native biochemical processes. Prior to perform CuAAC, the azide functionality should be introduced onto counterpart biomolecule by means of chemical or genetic modification. We offer ICG alkyne as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.