

# Product Data Sheet

Date of Issue: 22 Feb 2019

## 1. Product Information

- Product Name : ICG ADIBO
- Catalog Number : DOC1061
- 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 : ADIBO
- Reactive Toward : Azide
- Molecular Formula :  $C_{63}H_{64}N_4O_5S$
- Molecular Weight : 990 g/mol
- Excitation  $_{Max}$  :  $785 \pm 3$  nm
- Emission  $_{Max}$  :  $812 \pm 4$  nm
- Extinction Coefficient :  $\geq 172,000$  /cm·M

## 3. Description

ICG ADIBO is a strain-promoted azide-alkyne cycloaddition (SPAAC) 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 ADIBO couples with an azide to form 1,4-disubstituted 1,2,3-triazole inside of living systems without using any coupling reagents or catalyst nor interfering native biochemical processes. Prior to perform SPAAC, the azide functionality should be introduced onto counterpart biomolecule by means of chemical or genetic modification. We offer ICG ADIBO as a SPAAC reagent dye for cellular imaging and nucleotide functionalization.