

Product Data Sheet

Date of Issue: 5 Oct 2021

1. Product Information

- Product Name : FSD Fluor™ 800 NHS ester
- Catalog Number : POSC1803
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Liquid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : FSD Fluor™ 800
- Reactive Group : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 1399.03 g/mol
- Excitation_{Max} : 777 ± 3 nm
- Emission_{Max} : 792 ± 4 nm
- Extinction Coefficient : ≥ 232,000 /cm·M

3. Description

FSD Fluor™ 800 NHS ester is the new generation of amine reactive near infrared (NIR) fluorescent dye developed by BioActs' cutting-edge technology displaying excellent optical property comparing to spectrally similar dyes. The fluorescence intensity after binding to biomolecules such as antibody, nucleotide, and protein is also excellent, thus FSD Fluor™ series is ideal for various biochemical and biological analytical applications. FSD dye is conceivably the best existent dye for single-molecular detection of bioconjugates for fluorescence correlation spectroscopy and for fluorescence polarization measurements. The maxima of Ex/Em values are at 774/790 nm, similar to that of IRDye 800, Cy7.5 and CF770. Flamma 800 dyes might be excited using 750 or 785 nm laser line or dye-pumped laser excitation and the emission occurs at NIR region. FSD 800-conjugated primary and secondary antibody are used as molecular probes for in vitro imaging and other fluorescence detection methods. 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 FSD Fluor™ 800 NHS ester for labeling of antibodies, peptides, proteins, ligands and amplification substrates optimized for in vivo NIR imaging.