

Product Data Sheet

Date of Issue: 5 Oct 2021

1. Product Information

- Product Name : FSD Fluor™ 488 NHS ester
- Catalog Number : KOSC1002
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Orange Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : FSD Fluor™ 488
- Reactive Group : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 633.56 g/mol
- Excitation_{Max} : 495 ± 3 nm
- Emission_{Max} : 519 ± 4 nm
- Extinction Coefficient : ≥ 64,000 /cm·M

3. Description

FSD Fluor™ 488 NHS ester is the new generation of amine reactive bright green 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 495/519 nm, similar to that of Fluorescein. FSD 488 might be excited using 488 nm laser line and displays excellent optical property. FSD 488 can be conjugated to low-abundance biomolecules with great sensitivity and high molar ratios, allowing sensitive detection. 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™ 488 NHS ester for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection.