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Product Data Sheet

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1. Product Information

- Product Name : FSD Fluor™ 680 NHS ester
- Catalog Number : KOSC1515
- Packing Unit : 1mg / 5mg / 25mg
- Appearance : Blue Liquid
- Storage Conditions : Protect from Light at -20 ℃

2. Additional Information

- Fluorophore Label : FSD Fluor™ 680
- Reactive Group : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Reactive Toward : Azide
- Molecular Weight : 1515.1 g/mol
- Excitation $_{Max}$: 679 ± 3 nm
- Emission $_{Max}$: 696 ± 4 nm
- Extinction Coefficient : ≥ 200,000 /cm·M

3. Description

FSD Fluor™ 680 NHS ester is the new generation of amine reactive bright red 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 existing dye for single-molecular detection of bioconjugates for fluorescence correlation spectroscopy and for fluorescence polarization measurements. The maxima of Ex/Em values are at 679/696 nm, similar to that of Alexa 680, Cy5.5, IRDye 680LT and Dylight 680. FSD 680 might be excited using the 633 nm laser line and the emission occurs at biological tissue permeable NIR region. FSD 680 can be conjugated to low-abundance biomolecules with great sensitivity, allowing to achieve sensitive detection. NHS esters readily react with amino groups of proteins, i.e. the ε-amino groups of lysine, or amine terminus of modified nucleotides to form a chemically stable amide bond between dye and the biomolecule. We offer FSD Fluor™ 680 NHS ester for labeling of antibodies, peptides, proteins, ligands and amplification substrates optimized for in vitro and in vivo NIR imaging.