

# Product Data Sheet

Date of Issue: 26 Nov 2019

## 1. Product Information

- Product Name : Flamma®675 NA NHS ester
- Catalog Number : PNS1515
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at -20°C

## 2. Additional Information

- Fluorophore Label : Flamma®675 NA
- Reactive Group : NHS ester
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 680.85 g/mol
- Excitation<sub>Max</sub> : 684 ± 3 nm
- Emission<sub>Max</sub> : 710 ± 4 nm
- Extinction Coefficient : 152,000 /cm·M

## 3. Description

Flamma Fluors 675NA NHS ester is a reactive form of near infrared (NIR) fluorescent dye that analogous to cyanine 5.5 and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 686/709 nm, similar to that of Alexa 680, Cy5.5, IRDye 680LT and Dylight 680. Flamma 675NA might be excited using 633 nm laser line and the emission occurs at biological tissue permeable NIR region. Flamma 675NA dye can be conjugated into low-abundance biomolecules or incorporated into oligonucleotide synthesis as a fluorescence label. 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 Flamma Fluors 675NA NHS ester for labeling of biomolecules and amino-modified oligonucleotide in solid phase oligonucleotide synthesis.