

## **Product Data Sheet**

Date of Issue: 26 Nov 2019

## 1. Product Information

- Product Name : Flamma® 581NA NHS ester
- Catalog Number : PNS1415
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Purple Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Additional Information

• Fluorophore Label :	Flamma®581 NA
• Reactive Group :	NHS ester
• Reactive Toward :	Primary amine on proteins and ligands, amine-modified oligonucleotides
• Molecular Weight :	654 g/mol
• Excitation <sub>Max</sub> :	$590 \pm 3 \text{ nm}$
• Emission <sub>Max</sub> :	$608 \pm 4 \text{ nm}$
• Extinction Coefficient :	$\geq$ 79,000 /cm·M

## 3. Description

Flamma Fluors 581NA NHS ester is a reactive form of bright yellow fluorescent dye that analogous to cyanine 3.5 and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 590/608 nm, similar to that of Alexa 594 and DyLight 594. Flamma 581NA might be excited using 568 or 578 nm laser lines and displays excellent optical property. Flamma 581NA 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  $\varepsilon$ -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 581NA NHS ester for labeling of biomolecules and amino-modified oligonucleotide in solid phase oligonucleotide synthesis.

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. MATERIAL SAFETY DATA: Review the complete Material Safety Data Sheet before use Material Safety Data Sheet (MSDS), Certificate of Analysis (COA) and Technical Information are available at http://www.bioacts.com or upon request.