

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : Flamma® 774 Azide
- Catalog Number : PWZ1603
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 774
- Reactive Group : Azide
- Reactive Toward : Aldehyde, Ketone
- Molecular Weight : 1012.18 g/mol
- Excitation<sub>Max</sub> : 774 ± 3 nm
- Emission<sub>Max</sub> : 800 ± 4 nm
- Extinction Coefficient : ≥ 169,000 /cm·M

## 3. Description

Flamma® Fluors 774 Azide is a copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reagent of near infrared (NIR) fluorescent dye and used to generate a stable fluorescence signal in bioimaging. The azide reactive group is connected to the dye through an amino propyl linkage. The maxima of Ex/Em values are at 774/806 nm, similar to that of IRDye 800, Cy7.5 and CF770. Flamma 774 might be excited using 750 or 785 nm laser line or dye-pumped laser excitation and the emission occurs at NIR region. Flamma 774 azide couples with an alkyne to form 1,4-disubstituted 1,2,3-triazole inside of living systems without interfering native biochemical processes. Prior to perform CuAAC, the alkyne functionality should be introduced onto counterpart biomolecule by means of chemical or genetic modification. We offer Flamma Fluors 774 Azide as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.