

Product Data Sheet

Date of Issue: 22 Feb 2019

1. Product Information

- Product Name : Flamma® 581 Azide
- Catalog Number : KWZ1415
- 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
- Reactive Group : Azide
- Reactive Toward : Aldehyde, Ketone
- Molecular Formula : $C_{44}H_{52}N_6O_{13}S_4$
- Molecular Weight : 1001.18 g/mol
- Excitation $_{Max}$: 578 ± 3 nm
- Emission $_{Max}$: 593 ± 4 nm
- Extinction Coefficient : $\geq 109,000$ /cm·M

3. Description

Flamma® Fluors 581 Azide is a copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reagent of orange dye induced from benzindocyanine structure 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 578/593 nm, similar to that of Alexa 594 and DyLight 594. Flamma 581 might be excited using 561, 568 or 578 nm laser lines and displays excellent optical property. Flamma 581 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 Azide as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.