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Product Data Sheet

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1. Product Information

- Product Name : Flamma® 581 Alkyne
- Catalog Number : KWK1415
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Purple Solid
- Storage Conditions : Protect from Light at -20 ℃

2. Additional Information

- Fluorophore Label : Flamma® 581
- Reactive Group : Alkyne
- Reactive Toward : Azide
- Molecular Weight : 956.13 g/mol
- Excitation $_{Max}$: 578 ± 3 nm
- Emission $_{Max}$: 593 ± 4 nm
- Extinction Coefficient : ≥ 109,000 /cm·M

3. Description

Flamma® Fluors 581 Alkyne 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 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 alkyne couples with an azide to form 1,4-disubstituted 1,2,3-triazole inside of living systems without interfering native biochemical processes. Prior to perform CuAAC, the azide functionality should be introduced onto counterpart biomolecule by means of chemical or genetic modification. We offer Flamma Fluors 581 alkyne as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.