

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

• Product Name : Flamma® 581 ADIBO

· Catalog Number: DWC1415

 \cdot 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: ADIBO

· Reactive Toward: Azide

· Molecular Weight: 1177.39 g/mol

• Excitation $_{\text{Max}}$: 581 ± 3 nm

• Emission $_{\text{Max}}$: 595 ± 4 nm

• Extinction Coefficient : ≥ 109,000 /cm·M

3. Description

Flamma® Fluors 581 ADIBO is a strain-promoted azide-alkyne cycloaddition (SPAAC) 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 581/595 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 ADIBO couples with an azide to form 1,4-disubstituted 1,2,3-triazole inside of living systems without using any coupling reagents or catalyst nor interfering native biochemical processes. Prior to perform SPAAC, the azide functionality should be introduced onto counterpart biomolecule by means of chemical or genetic modification. We offer Flamma Fluors 581 ADIBO as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.