

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : Flamma® 552 Azide
- Catalog Number : PWZ1122
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Flamma® 552
- Reactive Group : Azide
- Reactive Toward : Aldehyde, Ketone
- Molecular Formula : $C_{37}H_{50}N_6O_7S_2$
- Molecular Weight : 754.96 g/mol
- Excitation $_{Max}$: 550 ± 3 nm
- Emission $_{Max}$: 564 ± 4 nm
- Extinction Coefficient : $\geq 136,000$ /cm·M

3. Description

Flamma® Fluors 552 Azide is a copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reagent of bright yellow dye induced from cyanine 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 550/565 nm, similar to that of Alexa 555, DyLight 549, ATTO 550 and Cy3. Flamma 552 might be excited using 532, 543, 546 or 555 nm laser lines and displays excellent optical property. Flamma 552 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.