

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

- Product Name : FAM PEG4-Alkyne
- Catalog Number : PWK1701
- Packing Unit : 25 mg
- Appearance : Yellow Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : FAM
- Reactive Group : PEG4-Alkyne
- Reactive Toward : Azide
- Molecular Formula : $C_{32}H_{33}NO_{10}$
- Molecular Weight : 591.61 g/mol
- Excitation_{Max} : 494 ± 3 nm
- Emission_{Max} : 522 ± 4 nm
- Extinction Coefficient : $\geq 60,000$ /cm·M

3. Description

FAM PEG4-Alkyne is a copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reagent of bright green dye used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 494/522 nm, similar to that of Alexa 488 and Cy2. FAM might be excited using 488 nm laser line and displays good optical property. The alkyne reactive group is connected to the dye through a tetraethylene glycol spacer. FAM PEG4-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 FAM PEG4-alkyne as a click chemistry reagent dye for cellular imaging and nucleotide functionalization.