FAM azide, 5-isomer


FAM azide for click chemistry labeling. FAM remains one of the most popular fluorescent labels for various applications. Most instruments capable of fluorescence detection, ranging from plate readers to fluorescence microscopes, are able to work in the FAM channel.

With the versatility of click chemistry and this reagent, it is possible to attach this popular fluorophore to nearly any alkyne-bearing molecule.

FAM azide is available both as a solid compound and as a 10 mM solution in DMSO ready to use in our recommended labeling protocol. This product is a pure 5-isomer. FAM is a replacement for DyLight 488.

Structure of 5-FAM azide

Absorption and emission spectra of FAM

**General properties**
- **Appearance:** yellowish crystals
- **Molecular weight:** 458.42
- **CAS number:** 510758-23-3
- **Molecular formula:** C_{24}H_{18}N_{4}O_{6}
- **Solubility:** soluble in polar organic solvents (DMF, DMSO, alcohols)
- **Quality control:** NMR \(^1\)H, HPLC-MS (95%)
- **Storage conditions:** Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.

**Spectral properties**
- **Excitation/absorption maximum, nm:** 492
- **ε, L⋅mol\(^{-1}\)⋅cm\(^{-1}\):** 74000
- **Emission maximum, nm:** 517
- **Fluorescence quantum yield:** 0.93
- **CF\(_{260}\):** 0.22
- **CF\(_{280}\):** 0.17