

Product number: K7-567

Product name: SeTau-405-mono-azide

General Data

Molecular Mass: 534.01

Solubility: water, alcohol, DMF, DMSO

Insoluble: acetone, chloroform, toluene

Storage: Store in absence of light, desiccated and refrigerate

Description

Hydrophilic, alkyne-reactive, long-lifetime reagent for click chemistry containing one azide function. Azides react with C-C-triple bonds in either a Cu(I)-catalyzed or Cu-free 1,3-dipolar cycloaddition reaction to triazole.

Applications

- Click chemistry reagent
- Fluorescence lifetime assays.
- Fluorescence polarization-based assays of high molecular weight antigens.

Advantages

- Highly fluorescent label for proteins and oligos.
- Quantum yield (Q.Y.) ~ 80 % (water)
- Long fluorescence lifetime of 9 ns in water
- Perfectly suited for excitation with the 380-nm and 404-nm diode lasers
- Large Stokes' shift: > 100 nm
- High fundamental polarization $R_0 = 475$ mP
- Highly soluble in aqueous buffer (500 mg/L at 20 °C)

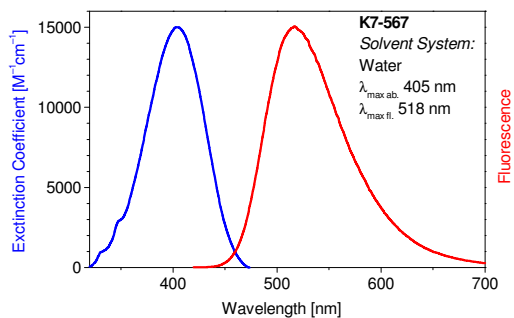
Spectral Data

Solvent System	Absorption max. [nm]	Extinction Coefficient [M ⁻¹ .cm ⁻¹]	Fluorescence ¹ max. [nm]	Q.Y. [%]	Luminescence Lifetime [ns]
water	405	13,800	518	80	9.3
ethanol	391		498	55	

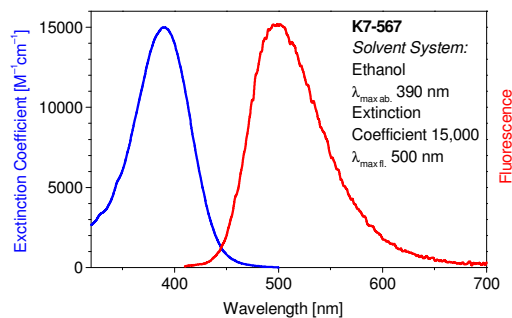
¹Excitation at 400 nm

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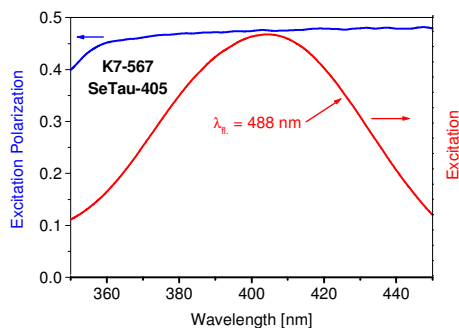
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Absorption and emission spectra of **SeTau 405-azide** in water



Absorption and emission spectra of **SeTau 405-azide** in ethanol



Excitation polarization and excitation spectra of **SeTau 405-azide** in water.
 Fundamental polarization $R_0 = 475$ mP when completely immobilized