

Product number: K7-549 Product name: SeTau-404-NHS

General Data

Molecular Mass:	543.02
Solubility:	water, alcohol, DMF, DMSO
Insoluble:	acetone, chloroform, toluene
Storage:	Store in absence of light, desiccated and refrigerate

Description

Hydrophilic, amine-reactive, long-lifetime fluorescent label containing one NHS-ester group.

Applications

- Covalent labeling of proteins, peptides, amino-modified DNA, amino-modified oligo-nucleotides and lipids.
- Fluorescence lifetime assays.
- Fluorescence polarization-based assays of higher molecular weight antigens (MW ~ 10 20 KDa).

Advantages

- Highly fluorescent label for proteins and other biomolecules.
- Long fluorescence lifetime of 9 ns in water
- Perfectly suited for excitation with the 380-nm and 404-nm diode lasers
- Large Stokes' shift (> 100nm)
- Highly soluble in aqueous buffer

Spectral Data

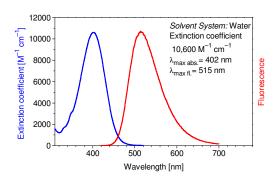
Solvent System: water

Sample	Dye-to-protein Ratio	Solvent System	Absorption max.	Extinction Coefficient	Fluorescence ¹ max.	Q.Y.	Luminescence Lifetime [ns]		
			[nm]	[M ⁻¹ ⋅cm ⁻¹]	[nm]	[%]	τ ₁	τ2	Mean τ
Free dye	—	water	402	10,600	515	52	9.3 (100%)	_	9.3
Free dye	—	pH 7.4	402		509				
BSA conjugate	2.0	pH 7.4	402		503		2.3ns (8%)	9.4ns (92%)	8.8

¹ Excitation at 400 nm



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Absorption and emission spectra of K7-549 in water