

**Product number: K9-4119**

**Product name: SeTau-665-mono-NHS**

## General Data

**Molecular Mass:** 1936.40

**Solubility:** Water, Alcohol, DMF, DMSO

**Insoluble:** Acetone, Chloroform, Toluene

**Storage:** Store in absence of light, desiccate and refrigerate

## Description

Amine-reactive fluorescent label containing one reactive NHS-ester group

## Applications

Covalent labeling of proteins, amino-modified DNA and amino-modified oligonucleotides

Fluorescence Polarization Label - this label combines a long lifetime and high fundamental anisotropy

## Advantages

- Perfectly suited for excitation with the 665-nm, 650-nm, or 647-nm lasers
- **Extremely sensitive:** high extinction coefficients and high quantum yields of 60% in aqueous environments
- **Good aqueous solubility:** this label does not alter the solubility of the protein conjugate
- **Ozone stability:** Higher ozone stability than **Alexa Fluor™ 647** or **Cy5** enables array experiments to be performed with **SeTau 665** under any environmental condition
- **Low molecular weight:** **SeTau** dyes do not add substantial mass to the conjugates
- **Photostability:** Much higher photostability than **Alexa Fluor™ 647** or **Cy5**
- **Long fluorescence lifetime:** ~ 3 ns in water
- Ideal for non-radioactive labeling of proteins, amino-modified DNA probes and amino-modified oligonucleotides

## Spectral Data

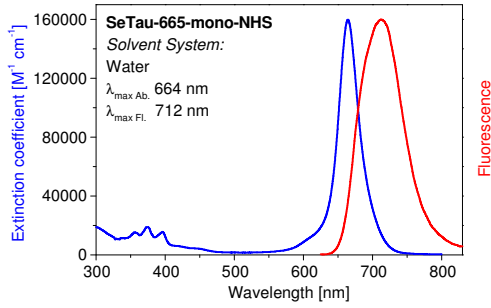
**Solvent System:** water

Sample	Dye-to-protein Ratio	Absorption max. [nm]	Extinction Coefficient [ $M^{-1}\cdot cm^{-1}$ ]	Fluorescence* max. [nm]	Quantum Yield [%]	Fluorescence Lifetime [ns]
Free dye	—	664	160,000	712	53	3.0
IgG conjugate 1	1.5	662		716	35	
IgG conjugate 2	3.0	662		716	24	
IgG conjugate 3	4.0	662		716	24	

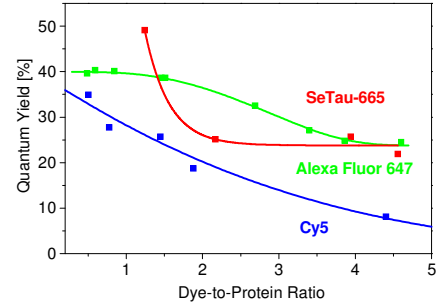
\* Excitation at 620 nm

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Absorption and emission spectrum of a **SeTau-665-mono-NHS** in phosphate buffer (pH 7.4)



Quantum yield vs. dye-to-protein ratio of **SeTau-665 – IgG conjugates** in phosphate buffer (pH 7.4)