

Product number: K8-1669

Product name: Seta-635-NH-mono-NHS

General Data

Molecular Mass: 753.80 (protonated form), 1012.28 salt with two molecules of DIPEA as counter ions

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 amino-modified DNA, amino-modified oligonucleotides and other small molecules

Advantages

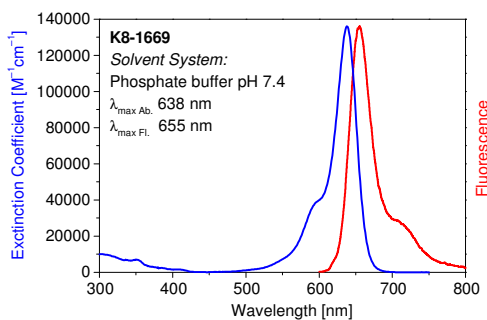
- Perfectly suited for excitation with the 635-nm diode laser
- **Fluorescence Lifetime Label: lifetime of compound was measured to be 1.8 ns in water**
- Sensitive; high extinction coefficients and high quantum yield of 31%
- Low non-specific binding
- Good aqueous solubility; this label does not alter the solubility of the protein conjugate
- Low molecular weight — **Seta** dyes do not add substantial mass to the conjugates
- Ideal for non-radioactive labeling of amino-modified DNA probes, amino-modified oligonucleotides and other small molecules

Spectral Data

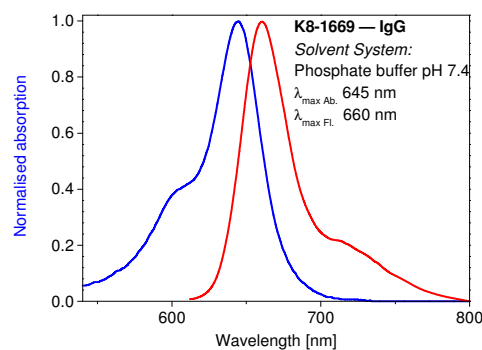
Solvent System: phosphate buffer, pH 7.4

Sample	Dye-to-protein Ratio	Absorption max. [nm]	Extinction Coefficient [$M^{-1}\cdot cm^{-1}$]	Fluorescence* max. [nm]	Quantum Yield [%]
Free dye	—	638	190,000	655	31

* Excitation at 620 nm



Absorption and emission spectrum of **K8-1669** in phosphate buffer (pH 7.4)



Absorption and emission spectrum of **K8-1669 — IgG conjugate** in phosphate buffer (pH 7.4, Dye-to-protein ratio 1.0)