

Product number: K8-1767

Product name: Seta-635-B-NH-di-NHS

General Data

Molecular Mass: 1061.06

Solubility: Water, Alcohol, DMF, DMSO

Insoluble: Acetone, Chloroform, Toluene

Storage: Store out of light, desiccated and refrigerate

Description

Amine-reactive fluorescent label containing two reactive NHS-ester groups.

Applications

- Covalent labeling of proteins, amino-modified DNA and amino-modified oligonucleotides
- Fluorescence Lifetime Label — this label exhibits a distinct lifetime change upon binding to a biomolecule
- Resonance Energy Transfer (RET)
- Flow Cytometry
- Immunofluorescence
- Gene Expression
- Homogeneous Assays
- Assessment of protein structure

Advantages

- Perfectly suited for excitation with the 404, 436, and 635-nm diode lasers and UV light
- Sensitive; high extinction coefficients and high quantum yields up to 20% after covalent attachment to proteins
- Quantum yield is increased when covalently and non-covalently bound to protein
- Good aqueous solubility; this label does not alter the solubility of the protein conjugate
- High photostability; e.g. compared to fluorescein or Cy5™
- Low molecular weight — **Seta** dyes do not add substantial mass to the conjugates
- Ideal for non-radioactive labeling of proteins, amino-modified DNA probes and amino-modified oligonucleotides

Spectral Data

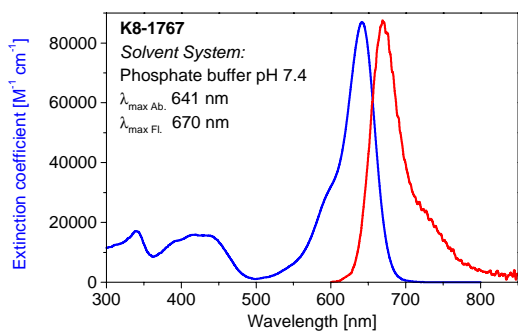
Solvent System: phosphate buffer pH 7.4

Sample	Dye-to-protein Ratio	Absorption max. [nm]	Extinction Coefficient [M ⁻¹ .cm ⁻¹]	Fluorescence* max. [nm]	Quantum Yield [%]
Free dye	—	641	87,000	670	21
BSA conjugate 1	0.5	660		689	17
BSA conjugate 2	1.0	660		689	10
BSA conjugate 3	2.0	658		690	5

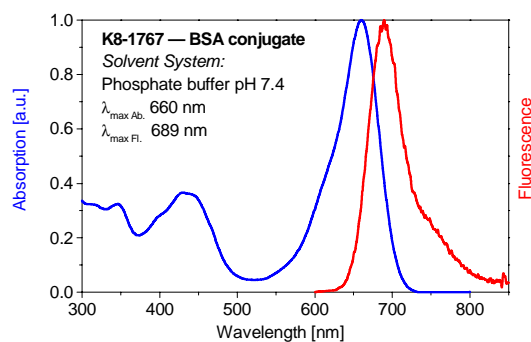
* Excitation at 630 nm

Product number: K8-1767

Product name: Seta-635-B-NH-di-NHS



Absorption and fluorescence spectra of **K8-1767** in phosphate buffer (pH 7.4)



Absorption and fluorescence spectra of **K8-1767 — BSA conjugate** in phosphate buffer (pH 7.4, Dye-to-protein ratio 1)