

General Data

- Molecular Mass:** 629.72
- Solubility:** Water, Alcohol, DMF, DMSO, Chloroform
- Insoluble:** Hexane, Toluene
- Storage:** Store out of light, desiccated and refrigerate

Description

Amine-reactive, non-fluorescent quencher containing one reactive NHS-ester group

- Very broad visible-wavelength absorption spectrum
- Efficient energy transfer acceptor for green- to orange-fluorescent dyes (FAM, TET, JOE, TAM, ROX, Cy3, Cy3.5, Alexa 532, Alexa 546, Alexa 568) in FRET applications

Applications

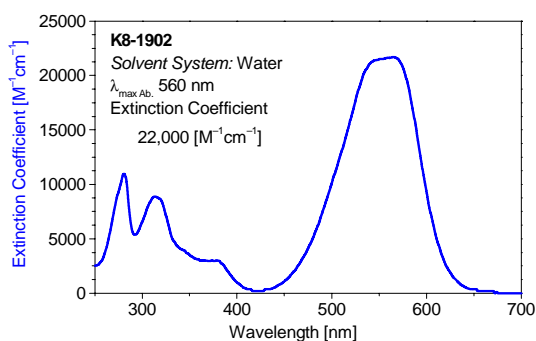
- Covalent labeling of proteins, peptides, amino-modified DNA and amino-modified oligonucleotides
- Energy Transfer (RET) acceptor for molecular beacons and other FRET based applications
- Real-time PCR
- Homogeneous Assays

Advantages

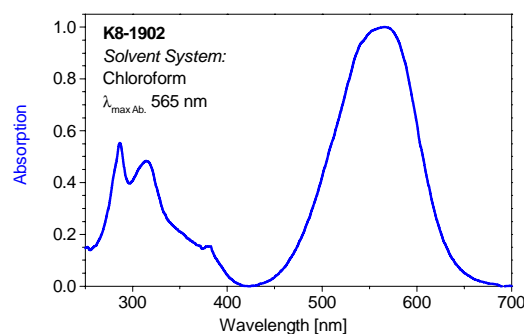
- pH-insensitive between pH 3 and pH 10
- Good aqueous solubility; this label does not alter the solubility of the protein conjugate
- Low molecular weight — **SQ** dyes do not add substantial mass to the conjugates
- Ideal for non-radioactive labeling of proteins, amino-modified DNA probes and amino-modified oligonucleotides

Spectral Data

Sample	Absorption Max. [nm]	Extinction Coefficient [$M^{-1}\cdot cm^{-1}$]
Free dye in water	560	22,000
Free dye in chloroform	565	



Absorption spectrum of **K8-1902** in water



Absorption spectrum of **K8-1902** in chloroform