

Product number: K8-3335

Product name: Seta-555-mono-NHS

General Data

- Molecular Mass:** 986.08 (protonated form)
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

Advantages

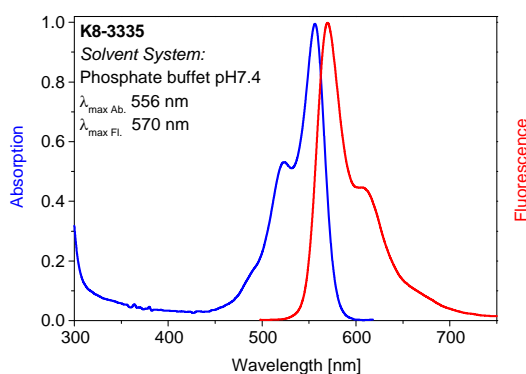
- Perfectly suited for excitation with the 532-nm laser
- **Good aqueous solubility:** this label does not alter the solubility of the protein conjugate
- **Low molecular weight:** Seta-555 does not add substantial mass to the conjugates
- **Photostability:** Higher photostability as compared to Alexa Fluor™ 555 or Cy3
- Ideal for non-radioactive labelling of proteins, amino-modified DNA probes and amino-modified oligonucleotides

Spectral Data

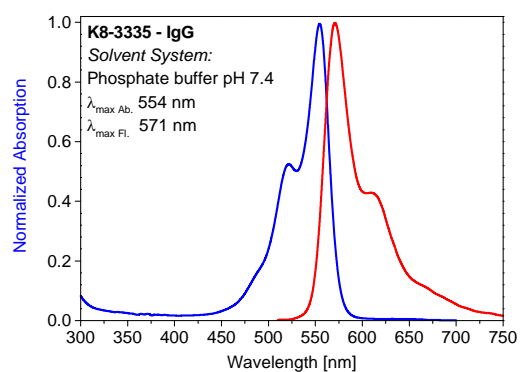
Solvent System: phosphate buffet pH 7.4

| Sample | Dye-to-protein Ratio | Absorption max. [nm] | Extinction Coefficient [$M^{-1}\cdot cm^{-1}$] | Fluorescence* max. [nm] | Quantum Yield [%] |
|-----------------|----------------------|----------------------|--|-------------------------|-------------------|
| Free dye | — | 556 | 154,000 | 570 | 7 |
| IgG conjugate 1 | 1.0 | 554 | | 571 | 13 |
| IgG conjugate 2 | 9.5 | 554 | | 571 | 10 |

* Excitation at 490 nm



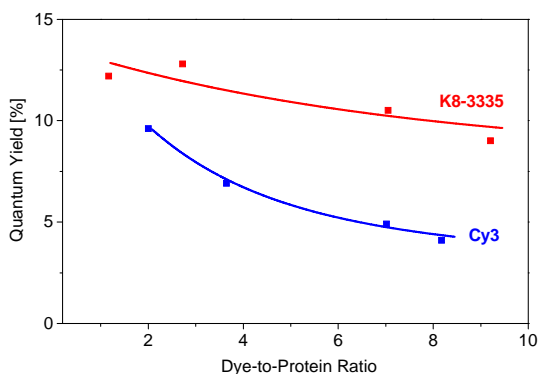
Absorption and emission spectrum of a **K8-3335** in phosphate buffer (pH 7.4)



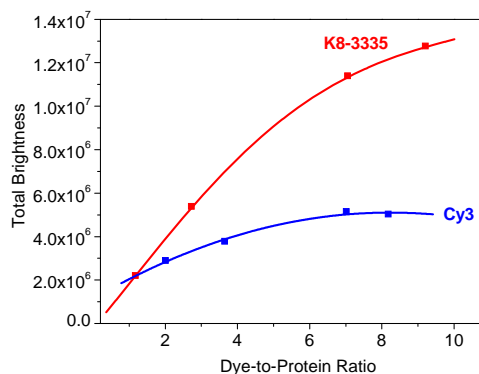
Absorption and emission spectrum of a **K8-3335 — IgG conjugate** in phosphate buffer (pH 7.4, Dye-to-protein ratio ~1.0)

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Quantum yield vs. dye-to-protein ratio (D/P) of **K8-3335 — IgG conjugates** in phosphate buffer (pH 7.4) as compared to **Cy3** conjugates



Total Brightness (Q.Y. x ϵ x D/P) of **K8-3335 — IgG conjugates** in phosphate buffer (pH 7.4) as compared to **Cy3** conjugates