

Product number: K8-5036

Product name: Seta-650-Maleimide

General Data

- Molecular Mass:** 1295.65
1037.17 (protonated form)
- Solubility:** Water, Alcohol, DMF, DMSO
- Insoluble:** Acetone, Chloroform, Toluene
- Storage:** Store in absence of light, desiccate and refrigerate

Description

- Highly hydrophilic, thiol-reactive label containing one maleimide group.

Applications

- Covalent labeling of proteins, peptides, thiol-modified DNA and thiol-modified oligonucleotides
- Fluorescence intensity and fluorescence polarization-based applications
- Resonance Energy Transfer (RET)
- Flow Cytometry
- Immunofluorescence
- Gene Expression
- Homogeneous Assays
- Microarrays

Advantages

- Perfectly suited for excitation with the 635-nm and 650-nm diode lasers
- Sensitive; high extinction coefficients and high quantum yields after covalent attachment to biomolecules
- pH-insensitive between pH 3 and pH 10
- Good aqueous solubility; this label does not alter the solubility of the bioconjugate
- High photostability compared to fluorescein, **Atto 647**, **DyLight 650**, **Alexa 647** or **Cy5TM**
- Low molecular weight — **Seta** dyes do not add substantial mass to the conjugates
- Ideal for labeling of proteins, and thiol-modified oligonucleotides, lipids and peptides

Spectral Data

Solvent System: phosphate buffer pH 7.4

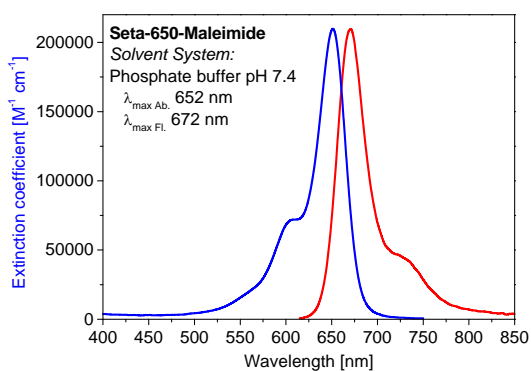
Sample	Absorption max. [nm]	Extinction Coefficient [$M^{-1}cm^{-1}$]	Fluorescence max. [nm]	Quantum Yield ¹ [%]
Free dye	652	200,000	672	28

¹ Excitation at 610 nm

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<http://www.setabiomedicals.com>
e-mail: info@setabiomedicals.com



Absorption and emission spectrum of **Seta-650-Maleimide** in phosphate buffer (pH 7.4)