

General Data

- Molecular Mass:** 652.76 (protonated form)
Solubility: Alcohol, DMF, DMSO, low soluble in Water,
Insoluble: Acetone, Chloroform, Toluene
Storage: Store out of light, desiccated and refrigerate

Description

- Fluorescent probe

Applications

- Cell staining
- Proteomics

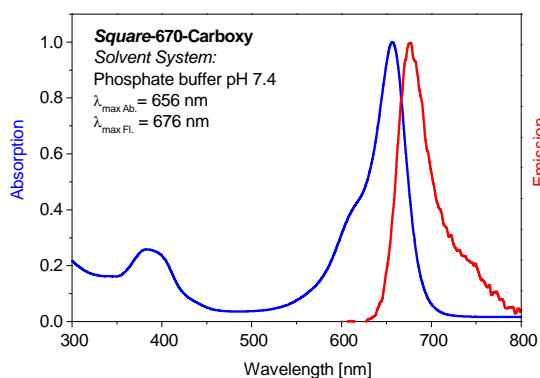
Advantages

- Perfectly suited for excitation with the 380, 405, 635, 650 and 670-nm diode lasers and UV light
- Sensitive; high extinction coefficients and high quantum yields in presence of proteins
- pH-insensitive between pH 3 and pH 10
- Low molecular weight

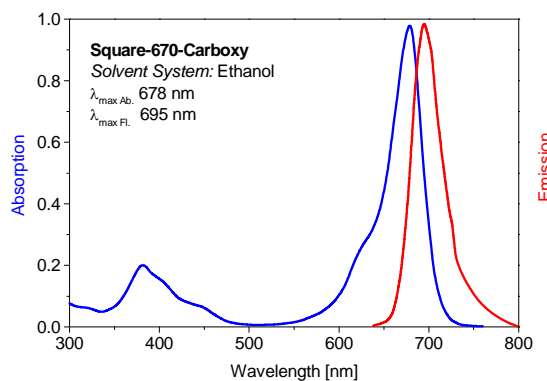
Spectral Data

Solvent System	Absorption max. [nm]	Extinction Coefficient [$M^{-1}cm^{-1}$]	Fluorescence max. [nm]	Quantum Yield ¹ [%]	Fluorescence Lifetime at 25 °C [ns]
Ethanol	678	207,000	695		
Phosphate buffer pH 7.4	656		676	1.7	0.29
1 μ M BSA / Phosphate buffer pH 7.4	673		693	29	

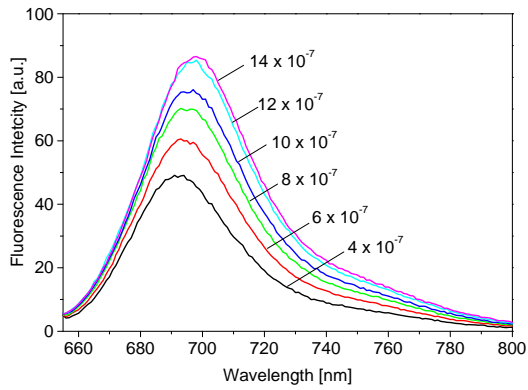
¹ Excitation at 620 nm



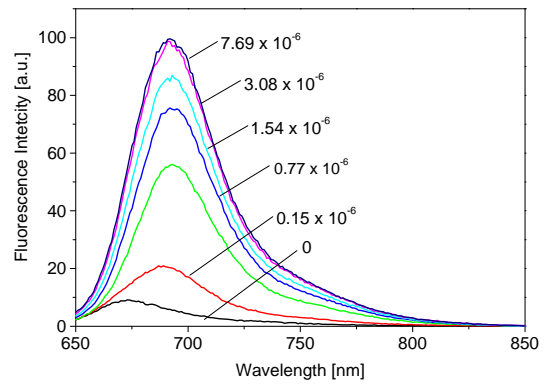
Absorption and emission spectra of **Square-670-Carboxy** in phosphate buffer (pH 7.4)



Absorption and emission spectra of **Square-670-Carboxy** in ethanol



Fluorescence intensity of **Square-670-Carboxy** at presence of 1×10^{-4} M BSA vs. dye concentration ($4-14 \times 10^{-7}$ M). Excitation at 635 nm



Fluorescence intensity of **Square-670-Carboxy** (4.7×10^{-7} M) vs. BSA concentration ($0-7.7 \times 10^{-6}$ M). Excitation at 635 nm