



Product number: K8-1350

Product name: Square-670-Carboxy

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

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

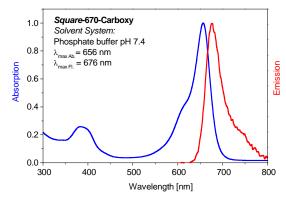
Advantages

- 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

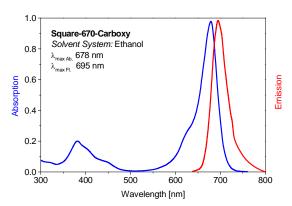
Spectral Data

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 μM 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)



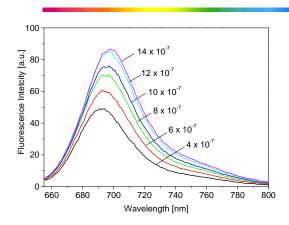
Absorption and emission spectra of **Square-670-Carboxy** in ethanol

Date: 01/04/15 - Page 2

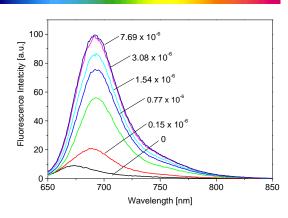
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Fluorescence intensity of **Square-670-Carboxy** at presence of 1×10^{-4} M BSA vs. dye concentration $(4-14\times10^{-7}$ M). Excitation at 635 nm



Fluorescence intensity of **Square-670-Carboxy** $(4.7\times10^{-7}\,\mathrm{M})\ vs.$ BSA concentration $(0-7.7\times10^{-6}\,\mathrm{M}).$ Excitation at 635 nm