

Product number: K8-1610

Product name: Square-635-Carboxy

General Data

- Molecular Mass:** 670.75 (protonated form)
Solubility: water, alcohol, DMF, DMSO
Insoluble: acetone, chloroform, toluene
Storage: Store in absence of light, desiccated and refrigerate

Description

- pH-Sensitive fluorescent probe containing one carboxylic acid group.

Applications

- pH-Sensing applications.
- Fluorescence lifetime applications — this label exhibits a distinct lifetime change upon binding to a biomolecule.

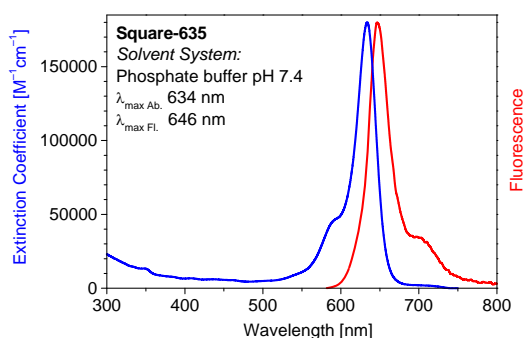
Advantages

- Perfectly suited for excitation with the 594-nm and 635-nm diode laser.
- Sensitive; high extinction coefficient.
- pH-sensitive between pH 9 and pH 13, and pH-insensitive between pH 3 and pH 9.
- Good aqueous solubility.
- High photostability; e.g. compared to **CypHer 5™**.

Spectral Data

Protonated form (phosphate buffer, pH < 8.0)				Deprotonated form (pH > 12.0)	pK _a	pH-Range
Absorption max. [nm]	Extinction Coefficient [M ⁻¹ cm ⁻¹]	Fluorescence ¹ max. [nm]	Quantum Yield ¹ [%]	Absorption max. [nm]		
634	180,000	646	9	520	10.7	9.6–11.7

¹ Excitation at 620 nm

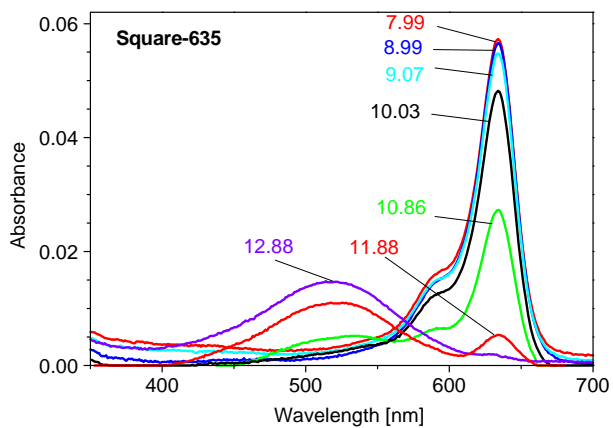


Absorption and fluorescence spectra of **Square-635** in phosphate buffer (pH 7.4)

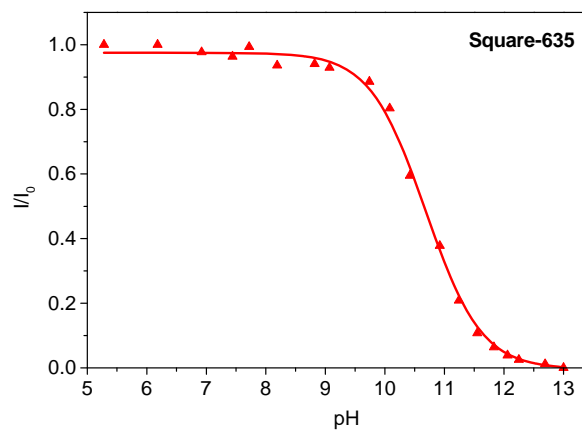
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<http://www.setabiomedicals.com>
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Absorption spectrum of **Square-635** in buffer vs. pH



Normalized fluorescence intensity of **Square-635** in buffer vs. pH (pKa 10.7)