

General Data

- Molecular Mass:** 804.89 (protonated form)
Solubility: Water, Alcohol, DMF, DMSO
Insoluble: Acetone, Chloroform, Toluene
Storage: Store out of light, desiccated and refrigerate

Description

- pH-sensitive fluorescent probe containing two carboxylic groups.

Applications

- pH-sensing applications.

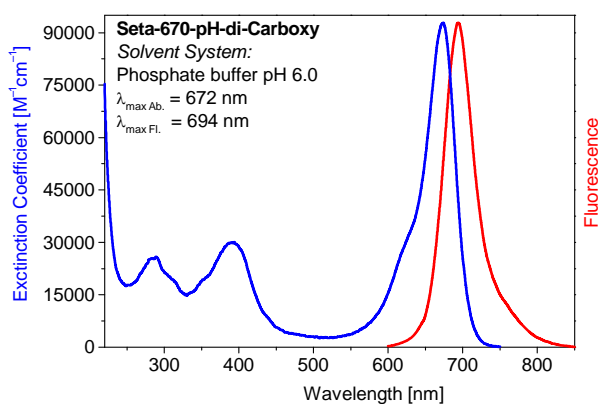
Advantages

- Perfectly suited for excitation with the 404, 370, 635, 650, and 670-nm diode lasers and LEDs.
- Sensitive; high extinction coefficients and high quantum yields up to 20% after covalent attachment to proteins.
- pH-sensitive between pH 7 and pH 11, and pH-insensitive between pH 3 and pH 7.
- Good aqueous solubility.

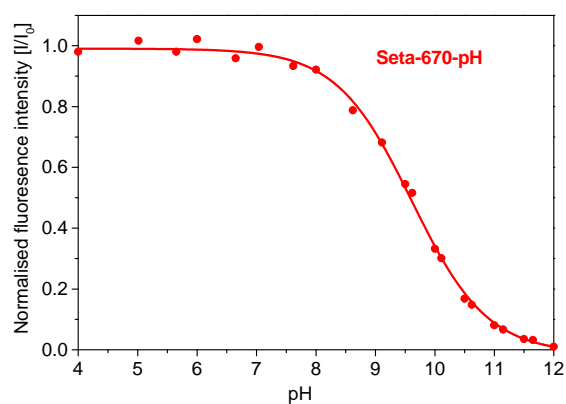
Spectral Data

Protonated form (phosphate buffer, pH < 7.4)				Deprotonated form (pH > 10.0)	pK _a	pH-Range
Absorption max. [nm]	Extinction Coefficient [M ⁻¹ cm ⁻¹]	Fluorescence max. [nm]	Quantum Yield ¹ [%]	Absorption max. [nm]		
672	93,000	694	19	535	9.55	7.60–11.35

¹ Excitation at 630 nm



Absorption and fluorescence spectra of **Seta-670-pH-di-Carboxy** in phosphate buffer (pH 7.4)



Fluorescence intensity of **Seta-670-pH** vs. pH (λ_{exc} 630 nm)