SETA BioMedicals
Fluorescent Tools for BioMedical Applications
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Product number: KS-470
Product name: 436–490 nm Fluorescence Polarization Standard

General Data

Solubility: water, alcohol, DMF, DMSO

Insoluble: acetone, chloroform, toluene

Storage: Store in absence of light and refrigerate

Description

- Fluorescence Polarization Standard for the range between 436 and 490 nm

Application

- Calibration of fluorescence polarization instrumentation

Advantages

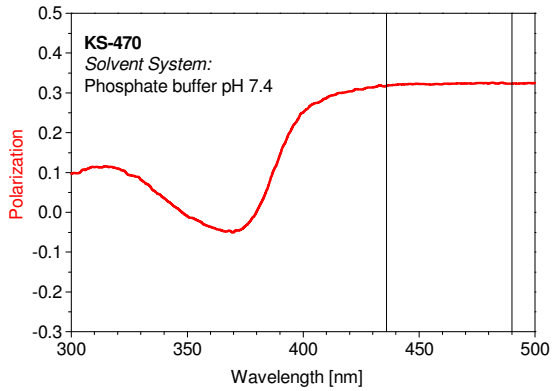
- Suited for excitation with the 436, and 470-nm diode lasers and Argon-ion laser (488 nm)

Spectral Data

Solvent System	Excitation Range [nm]	Emission Range [nm]	Fluorescence Lifetime at 25 ºC [ns]	Polarization at 25 ºC [mP]
Phosphate buffer pH 7.4 (10 mM)	436–490	515–530	0.21±0.03[2]	321±3

[1] Excitation at 400 nm

[2] **KS-470** in water *vs.* $(Me)_2$POPOP, ISS Chronos FD, $\lambda_{ex.}$= 370 nm LED, τ_{mean} **= 0.24 ns**, χ^2=1.13;



Excitation Polarization Spectrum of **KS-470** measured at 25 ºC in phosphate buffer pH 7.4. The fluorescence polarization *P* remains constant at 321±3 mP between 436 nm and 490 nm

Sample Preparation

The standard kit consists of 4 vials of the standard supplied as a solid in a 5 mL vial. The supplied standard is to be injected in its original vial with 4 mL of distilled or deionized water to yield a standard solution in 10 mM phosphate buffer pH 7.4. For measurement the solution is then transferred to an optical cuvette using a syringe filter, e.g. a 0.45 mm GHP ACRODISC (PALL), (not included). Do not store these solutions for an extended period of time.