SETA BioMedicals
Fluorescent Tools for BioMedical Applications
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Product number: KS-405
Product name: 370–420 nm Fluorescence Lifetime and Polarization Standard

General Data

Solubility: water, alcohol, DMF, DMSO

Storage: Store in absence of light, desiccated and refrigerate

Description

- Fluorescence lifetime and fluorescence polarization standard for the excitation range between 355 and 400 nm and emission range between 490–590 nm

Applications

- Calibration of fluorescence instrumentation equipped with polarizers for fluorescence polarization measurements
- Calibration of instrumentation for fluorescence lifetime measurements

Storage

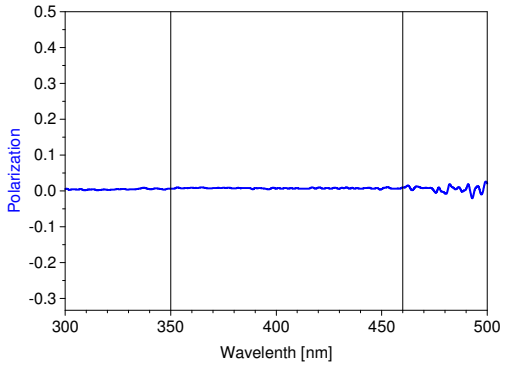
- Refrigerated in absence of light

Spectral Data

Solvent System	Excitation Range [nm]	Emission Range [nm]	Q.Y. [1] [%]	Fluorescence Lifetime at 25 ºC [ns]	Polarization at 25 ºC [mP]
Water	370–420	490–590	80	9.07±0.03[2]	9±3[3]

[1] Excitation at 400 nm.

[2] **KS-405** in water *vs.* Ludox, ISS Chronos BH, $\lambda_{ex.}$ = 370 nm LED, **τ = 9.09±0.01 ns**, χ^2=1.10;
KS-405 in water *vs.* Ludox, ISS Chronos BH, $\lambda_{ex.}$ = 408 nm LED, **τ = 9.04±0.01 ns**, χ^2=1.08.



Excitation Polarization Spectrum of **KS-405** at 25 ºC in water. The fluorescence polarization is constant at 9±3 mP

Sample Preparation

The standard kit containing 4 vials of the standard is supplied as a solid in a 5 mL vial. The standard is to be dissolved in its original vial with 4 mL of distilled or deionized water. For measurement it is recommended to transfer the solution to an optical cuvette using a syringe nano-filter (e.g. 0.45 mm GHP ACRODISC (PALL), not included). Do not store these solutions for an extended period of time.