

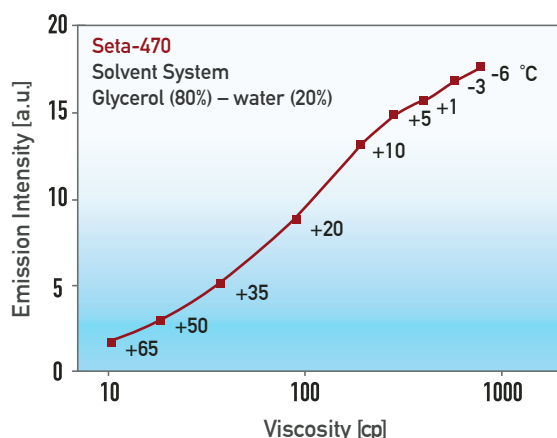
SETA Viscosity-Sensitive Dyes



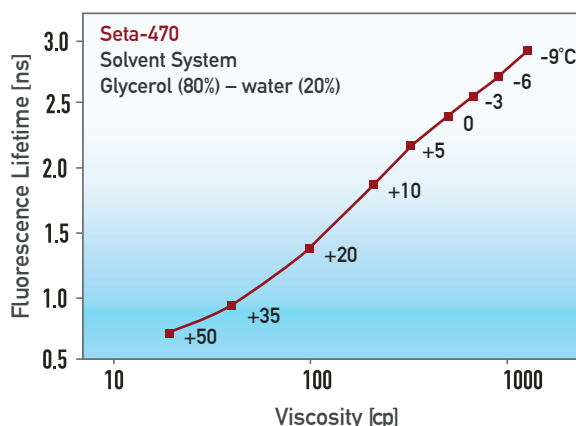
SETA BioMedicals proprietary fluorescent viscosity-sensitive probes for biomedical imaging and sensing applications combine good solubility in water and aqueous buffers, high photostability, a large Stokes' shift and absorption and emission wavelengths in the visible range.

These molecular rotors exhibit high sensitivity as well as a large dynamic range in both the lifetime and intensity modes. They are available in reactive (NHS-ester and maleimide) and non-reactive formats.

Product Number	Product Name	Target Group	Medium	λ_{abs} [nm]	ϵ [$M^{-1} \cdot cm^{-1}$]	λ_{em} [nm]	QY [%]	Medium	λ_{abs} [nm]	ϵ [$M^{-1} \cdot cm^{-1}$]	λ_{em} [nm]	QY [%]
K8-3002	Seta-470-NHS	NH ₂	water	469	50000	521	1.9	BSA D/P=1	469	500000	515	28
K8-3003	Seta-470-Maleimide	SH	water	469	50000	521	1.9	BSA D/P=1	469	500000	515	28
K8-3010	Square-460		PB 7.4	467	50000	515	0.9	Glycerol	470	500000	515	43



Fluorescence intensity of Seta-470 vs. viscosity in glycerol-water = 4:1



Fluorescence lifetime of Seta-470 vs. viscosity in glycerol-water = 4:1

The emission intensity as well as the fluorescence lifetime of these molecular rotors increases with increasing viscosity. These labels are ideal for monitoring environmental changes due to protein folding or molecular interactions.