

Fast-responding potentiometric probe

Instruction Manual

Catalog Number	PK-CA707-61016
Description	The styryl dye RH414 is a fast-responding potentiometric probe that is primarily used for functional imaging of neurons. In cell membranes, spectra of styryl dyes are typically blue-shifted by as much as 20 nm for absorption or excitation and 80 nm for emission.
Quantity	5 mg
Excitation / Emission Maxima	$\lambda_{ex} \backslash \lambda_{em}$ (in MeOH) = 532/716 nm; Extinction coefficient = 42,000 (in MeOH)
Molecular Structure	$(\text{CH}_3\text{CH}_2)_2\text{N}-\text{C}_6\text{H}_4-(\text{CH}=\text{CH})_2-\text{C}_6\text{H}_4-\text{N}^+(\text{CH}_2)_3\text{N}^+(\text{CH}_2\text{CH}_3)_3$ <p style="text-align: right;">2Br^-</p>
Molecular Weight / Molecular Formula	581.48 Da; $\text{C}_{28}\text{H}_{43}\text{Br}_2\text{N}_3$
Purity	NA
Appearance / Formulation / Solubility	Orange red; soluble in water or DMSO.
Storage & Stability	Store desiccated at -20°C . Protect from light, especially when in solution.
Applications	See Description
References	1) Neuroscience 31, 613 (1989)
Caution	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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