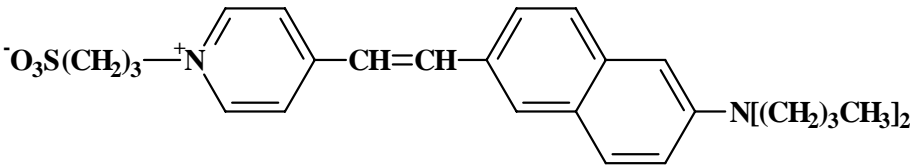


Fast-responding membrane-potential dye

Instruction Manual

Catalog Number	PK-CA707-61010
Description	<p>Di-4-ANEPPS is a fast-responding membrane potential dye. It responds to alterations in membrane potential with opposite changes in fluorescence excitation intensity at 440 and 505 nm. The changes can be correlated by ratiometric methods to the changes in the membrane potential of the cell.</p> <p>Di-4-ANEPPS has been developed for spatially resolved optical imaging of membrane potential. It has been used to e.g. image spiral waves of membrane potential in canine epicardial muscle, and to measure membrane potentials of non-exitable cells.</p>
Quantity	5 mg
Excitation / Emission Maxima	$\lambda_{ex} \backslash \lambda_{em}$ (in MeOH) = 496/705 nm; Extinction coefficient = 39,000 (in MeOH)
Molecular Structure	
Molecular Weight / Molecular Formula	481 Da; C ₂₈ H ₃₆ N ₂ O ₃ S
Purity	>99% (as determined by HPLC)
Appearance / Formulation / Solubility	Orange-red solid; soluble in DMF, EtOH or DMSO.
Storage & Stability	Store desiccated at $\leq 4^{\circ}\text{C}$. Protect from light, especially when in solution.
Applications	Membrane-potential dye
References	<p>1) Davidenko, J.M., et al. Nature 355, 349(1992)</p> <p>2) Fromherz, P., et al. Biochim. Biophys. Acta 1068, 149(1991)</p>
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.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.