

### Instruction Manual

Catalog Number	PK-CA707-61013
Description	Di-2-ANEPEQ, also called JPW1114, is a fast-responding membrane potential dye. It is highly water-soluble and is usually introduced into cells by microinjection. The dye can also be applied to brain tissues topically.
Quantity	5 mg
Excitation / Emission Maxima	$\lambda_{exc}/\lambda_{em}$ (in EtOH) = 530/720 nm ; Extinction coefficient = 30,000 (in MeOH)
Molecular Structure	<p>The structure shows a central trans-stilbene core. The left phenyl ring is substituted with a diethylamino group <math>(CH_3CH_2)_2N-</math>. The right phenyl ring is substituted with a trimethylammonium ethyl chain <math>-CH_2CH_2N^+(CH_3)_3</math>. Two bromide ions <math>2Br^-</math> are shown as counterions.</p>
Molecular Weight / Molecular Formula	547.12 Da; $C_{26}H_{35}Br_2N_3$
Purity	>95% (as determined by TLC)
Appearance / Formulation / Solubility	Dark red solid; soluble in water, EtOH or DMSO.
Storage & Stability	Store desiccated at $\leq -20^\circ C$ . Protect from light, especially when in solution.
Applications	Membrane-potential dye
References	1) Biol. Bull. 198, 1(2000) 2) Proc. Natl. Acad Sci. USA 94, 7621(1997)
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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