

N-(4-sulfobutyl)-4-(4-(4-(dipentylamino)phenyl)butadienyl) pyridinium, inner salt

Instruction Manual

Catalog Number	PK-CA707-61017
Description	RH421 is a fast responding membrane potential dye, exhibiting >20% fluorescence change per 100 mV on neuroblastoma cells.
Quantity	25 mg
Excitation / Emission Maxima	$\lambda_{ex} \backslash \lambda_{em}$ (in MeOH) = 515/704 nm ; Extinction coefficient = 50,000 (in MeOH)
Molecular Structure	<p>The chemical structure shows a central dipentylamino group (N(CH₂CH₂CH₂CH₂CH₃)₂) attached to a phenyl ring. This phenyl ring is connected via a butadiene bridge (-CH=CH-CH=CH-) to another phenyl ring. The second phenyl ring is substituted with a pyridinium ring, which is further substituted with a butyl chain ending in a sulfonate group (-SO₃⁻).</p>
Molecular Weight / Molecular Formula	498.72 Da; C ₂₉ H ₄₂ N ₂ O ₃ S
Purity	NA
Appearance / Formulation / Solubility	Red solid; soluble in DMSO, EtOH or DMF.
Storage & Stability	Store desiccated at -20°C. Protect from light, especially when in solution.
Applications	Membrane-potential dye
References	Biophys. J. 42, 195(1983)
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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