Nonyl Acridine Orange (NAO)

Mitochondria stain

Instruction Manual

Catalog Number	PK-CA707-70012
Description	NAO is a mitochondrial dye whose staining is not dependent on mitochondrial membrane potential, unlike JC-1 and Rhodamine 123 (See Cat.Nos. PK-CA707-70011 and PK-CA707-70010). NAO has been used to study multidrug resistance and to measure changes in mitochondrial mass during apopotosis.
Quantity	50 mg
Excitation / Emission Maxima	$\lambda ex \lambda em$ (in MeOH) = 495/519 nm; Extinction coefficient = 84,000
Molecular Structure	$Me_2N \xrightarrow{N + Br} NMe_2$ $(CH_2)_8CH_3$
Molecular Weight / Molecular Formula	473 Da; C₂6H₃8BrN₃
Purity	>95% (as determined by HPLC)
Appearance / Formulation / Solubility	Orange solid; soluble in DMSO.
Storage & Stability	Store desiccated at \leq 4°C. Protect from light, especially when in solution.
Applications	See Description
References	1) Cytometry 9, 206(1988) 2) Cancer Res. 51, 4665(1991) 3) Exp. Cell Res. 214, 323(1994)
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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