Dihydrorhodamine 123, dihydrochloride salt Promo Kine



Reduced form of rhodamine, dihydrochloride salt

Instruction Manual	
Catalog Number	PK-CA707-10056
Description	Dihydrorhodamine 123 is the reduced form of rhodamine 123 (Cat. No. PK-CA707-70010), which is a commonly used fluorescent mitochondrial dye. Dihydrorhodamine 123 itself is nonfluorescent, but it readily enters most of the cells and is oxidized by oxidative species or by cellular redox systems to the fluorescent rhodamine 123 that accumulates in mitochondrial membranes. Dihydrorhodamine 123 is useful for detecting reactive oxygen species including superoxide (in the presence of peroxidase or cytochrome c) and peroxynitrite. Dihydrorhodamine 123, dihydrochloride is functionally equivalent to dihydrorhodamine 123 (Cat. No. PK-CA707-10055) but with increased stability toward air oxidation and light during storage.
Quantity	10 mg
Excitation / Emission Maxima	NA
Molecular Structure	H ₂ N NH ₂ H _{CO₂CH₃}
Molecular Weight / Molecular Formula	419 Da; C ₂₁ H ₂₀ Cl ₂ N ₂ O ₃
Purity	≥ 96% by HPLC
Appearance / Formulation / Solubility	Off-white to pink solid; soluble in DMF (>10 mg/ml). Do not use DMSO.
Storage & Stability	Store desiccated at -20°C (if possible under nitrogen or argon) and protect from light, especially when in solution.
Applications	See Description.
References	1) J. Immunol. Meth. 178, 89(1995) 2) Eur. J. Biochem. 217, 973(1993) 3) Arc. Biochem. Biophys. 302, 348(1993) 4) Biochemistry 34, 3544(1995) 5) Free Rad. Biol Med. 16, 149(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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