
Dihydrorhodamine 123

产品编号: D-9112

CAS: 109244-58-8

保存条件: Store at -20°C, protect from light.

产品介绍: Dihydrorhodamine 123 is a fluorescent probe ($\lambda_{ex}=488$ nm, $\lambda_{em}=525$ nm).

Dihydrorhodamine 123 is the reduced form of rhodamine 123, which is a commonly used fluorescent mitochondrial dye. Dihydrorhodamine 123 itself is non-fluorescent, but it readily enters cells and is oxidized by oxidative species or by cellular redox systems to the fluorescent rhodamine 123 that accumulates in mitochondrial membranes (1).

Dihydrorhodamine 123 is useful for detecting reactive oxygen species including superoxide (in the presence of peroxidase or cytochrome c) (2,3) and peroxynitrite (4,5). Also see dihydrorhodamine 123 dihydrochloride, a more stable and water soluble form of dihydrorhodamine 123.

Dihydrorhodamine 123 是一种荧光探针 ($\lambda_{ex}=488$ nm, $\lambda_{em}=525$ nm)。

CAS: 109244-58-8

分子式: C₂₁H₁₈N₂O₃

分子量: 346.38

MDL: MFCD00285712

简介: 二氢罗丹明123 (Dihydrorhodamine 123)是一种不带电荷且无荧光的活性氧(ROS)指示剂,能够主动扩散穿透细胞膜,进入细胞后被氧化为阳离子的罗丹明123,定位在线粒体上,发射亮绿色荧光 (Ex/Em=500/536 nm)。淡一氧化氮(NO),超氧化物,或过氧化氢(H₂O₂)不能氧化DHR123,但是,当这些活性氧物质(ROS)与其他细胞组分比如细胞色素C氧化酶或Fe²⁺联合起来能够氧化DHR123生成应该衍生物罗丹明123.DHR 123能用于检测内皮细胞、嗜酸性细胞和反应性小胶质细胞产生的活性氧中间产物。