Glowing products for science

Call us : 800-304-5357

Dihydrorhodamine 123

Dihydrorhodamine 123 is the reduced form of rhodamine 123 (70010), which is a commonly used fluorescent mitochondrial dye.

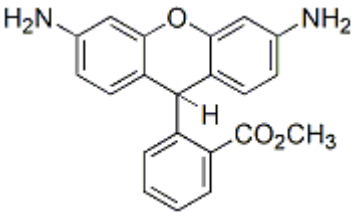
Product attributes

CAS number	109244-58-8
Probe cellular localization	Mitochondria
For live or fixed cells	For live/intact cells
Assay type/options	No-wash staining, Real-time imaging
Colors	Red
Excitation/Emission	505/534 nm (end product)

Product Description

Dihydrorhodamine 123 is the reduced form of rhodamine 123 (70010), 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 (10056), a more stable and water soluble form of dihydrorhodamine 123.

- White solid soluble in DMSO
- Store at -20°C and protect from air and light, especially when in solution
- $C_{20}H_{18}N_2O_3$
- MW: 346
- [109244-58-8]



References

1. Br J of Pharmacol (2010) doi: 10.1111/j.1476-5381.2010.01120.x

2. J Immunol Meth 178, 89 (1995).

3. Biochemistry 34, 3544 (1995).

4. Eur J Biochem. 217, 973 (1993).

5. Arc Biochem Biophys 302, 348 (1993).