Nonyl Acridine Orange (NAO)

NAO is a green fluorescent mitochondrial dye whose staining is not dependent on mitochondrial membrane potential.



Product Description

NAO is a green fluorescent mitochondrial dye whose staining is not dependent on mitochondrial membrane potential (1), unlike JC-1 (70011) or Rhodamine 123 (70010). NAO has been used to study multidrug resistance (2) and to measure changes in mitochondrial mass during apoptosis (3). The dye is reported to bind cardiolipin, a phosphoprotein in the inner mitochondrial membrane (4). Also see our MitoViewTM Dyes and other mitochondrial dyes.

- $\lambda_{Ex}/\lambda_{Em}$ (MeOH) = 495/522 nm
- ε (MeOH) = 63,000
- Orange solid soluble in DMSO or DMF
- Store at 4°C and protect from light, especially in solution
- C₂₆H₃₈BrN₃
- MW: 473
- [75168-11-5]

References

- 1. Cytometry 9, 206 (1988).
- 2. Cancer Res 51, 4665 (1991).
- 3. Exp Cell Res 214, 323 (1994).
- 4. FEBS Letters 260, 236 (1990).

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Product attributes

CAS number	75168-11-5
Probe cellular localization	Mitochondria
For live or fixed cells	For live/intact cells
Assay type/options	No-wash staining, Real-time imaging
Potential dependence	Mitochondrial potential-independent
Colors	Red
Excitation/Emission	495/522 nm

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