

Product Information

NAO [nonyl acridine orange]

Catalog Number: N4002

Product Size: 20 mg

Parameters

Appearance: Orange solid soluble in DMSO or DMF

 $\lambda Ex/\lambda Em(MeOH) = 495/522 \text{ nm}$

CAS No.: 75168-11-5

Molecular Formula: C₂₆H₃₈BrN₃

Molecular Weight: 473

Molecular Structure:

$$(CH_3)_2N = \bigcap_{Br^- (CH_2)_8CH_3} N(CH_3)_2$$

Storage

Store at 4°C and protect from light. When stored as directed, product is stable for at least 12 months.

Description

10-nonyl acridine orange (NAO) is a derivative of acridine orange. It is a specific fluorescent probe used to detect mitochondria in intact cells. The mitochondrial uptake is reported to not to depend on membrane potential, unlike many other mitochondrial probes. It can be used as a fluorescent probe for mitochondria in living cells. It can also be used to locate mitochondria and monitor mitochondrial integrity. In addition, this derivative has been used to analyze mitochondria by flow cytometry, to characterize multidrug resistance and to measure changes in mitochondrial mass during apoptosis.

Notes

- 1. There are quenching problems with fluorescent dyes. Please avoid light to slow down the fluorescence quenching.
- 2. For your safety and health, please wear lab coats and disposable gloves.