## Data Sheet (Cat.No.T14117)



### Acridine Orange 10-Nonyl Bromide

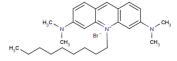
## **Chemical Properties**

CAS No.: 75168-11-5 Formula: C26H38BrN3

Molecular Weight: 472.5

Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	Acridine Orange 10-Nonyl Bromide is a cardiolipin fluorescent probe (λex: 489 nm, λem: 525 nm).	
Targets(IC <sub>50</sub> )	Others: None	
In vivo	Acridine Orange 10-Nonyl Bromide is a fluorescent probe for cardiolipin ( $\lambda$ ex: 489 nm, $\lambda$ em: 525 nm) which can be used to quantify the cardiolipin in isolated mitochondria[1]. when Acridine Orange 10-Nonyl Bromide interacts with cardiolipin, the dye excitation and emission wave lengths shift from 496 and 525 nm to 450 and 640 nm, respectively. Increasing amounts of cardiolipin (0 to 30 $\mu$ M) and other acidic phospholipids in thinwalled vesicles added to Acridine Orange 10-Nonyl Bromide (45 $\mu$ M) changes the red fluorescence emission measured at 640 nm according to the liposome composition[2].	

# **Solubility Information**

Solubility	DMSO: 25 mg/mL (52.91 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.116 mL	10.582 mL	21.164 mL
5 mM	0.423 mL	2.116 mL	4.233 mL
10 mM	0.212 mL	1.058 mL	2.116 mL
50 mM	0.042 mL	0.212 mL	0.423 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

- 1. Ratinaud MH, et al. In situ flow cytometric analysis of nonyl acridine orange-stained mitochondria from splenocytes. Cytometry. 1988 May;9(3):206-12.
- 2. Gallet PF, et al. Direct cardiolipin assay in yeast using the red fluorescence emission of 10-N-nonyl acridine orange. Eur J Biochem. 1995 Feb 15;228(1):113-9.

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