

Nonyl acridine orange *CAS 75168-11-5*

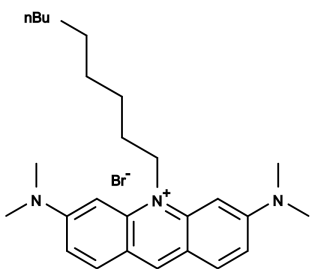
Catalog number: 22205

Unit size: 25 mg

Product Details

Storage Conditions	Freeze (<math>< -15\text{ }^{\circ}\text{C}</math>), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Red solid
Molecular Weight	472.5
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	496 nm
Emission Wavelength	519 nm

Applications

10-n-Nonyl acridine orange (NAO) is a mitochondrial-specific fluorochrome. In contrast with Rh 123, NAO accumulation in the cell does not seem to be driven by the proton-motive force but does seem to be related to specific interactions with mitochondrial membrane proteins and/or lipids. NAO uptake is independent of mitochondrial transmembrane potential. It is used to examine the changes in the mitochondrial compartment during the transfer of articular chondrocytes from cartilage to the culture conditions, where Rh 123 proves changes in mitochondrial activity and/or biogenesis. It is used for distinguishing mitochondrial activity from biogenesis. NAO and Rhodamine 123 (Rh 123) is a good pair of dyes for studying mitochondrial functions.