

# NAO (ultra pure)

## Mitochondria dye

10-N-Nonyl acridine orange (NAO) is an acridine orange derivative and is generally used as a fluorescent marker of the inner mitochondrial membrane in whole cells. It is believed to bind to negatively charged phospholipids. NAO accumulation in the cell seems to be related to specific interactions with mitochondrial membrane proteins and/or lipids, such as cardiolipin, and is largely independent of mitochondrial membrane potential. With respect to apoptosis, the presence of mitochondrial membrane potential can be probed with Rhodamine123 while the structure and integrity of mitochondria can be assessed using 10-N-nonyl-acridine orange. Wavelength Maxima: Excitation 495nm, Emission 519nm

Citations: 10

[View Online »](#)

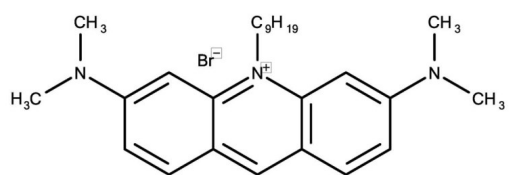
## Ordering Information

[Order Online »](#)

|           |      |
|-----------|------|
| ENZ-52306 | 25mg |
|-----------|------|

## Manuals, SDS & CofA

[View Online »](#)



## Handling & Storage

|                   |  |
|-------------------|--|
| Use/Stability     | Stable for at least one year after receipt when stored as recommended. |
| Handling          | Protect from light. Keep cool and dry.                                 |
| Long Term Storage | -20°C  |
| Shipping          | Ambient Temperature  |

## Regulatory Status

RUO - Research Use Only

## Product Details

|                  |   |
|------------------|---|
| Alternative Name | Nonyl Acridine Orange, 3,6-bis(Dimethylamino)-10-nonyl-acridinium bromide |
| CAS              | 75168-11-5  |
| MW               | 472.5   |
| Purity           | ≥95% (HPLC).  |
| Solubility       | Soluble in DMSO.  |

## Technical Info / Product Notes

This product is a member of the CELLESTIAL<sup>®</sup> product line, reagents and assay kits comprising fluorescent molecular probes that have been extensively benchmarked for live cell analysis applications. CELLESTIAL<sup>®</sup> reagents and kits are optimal for use in demanding imaging applications, such as confocal microscopy, flow cytometry and HCS, where consistency and reproducibility are required.

Last modified: May 29, 2024



ENZO LIFE SCIENCES,  
INC.  
Phone: 800.942.0430  
[info-usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)