OPEN ACCESS

✓ protocols.io

# Vacuole staining in Phaeodactylum tricornutum using RatioWorks™ PDMPO

# Jernej Turnsek

#### **Abstract**

Simple and rapid vacuole staining protocol. Note that RatioWorks<sup>TM</sup> PDMPO and LysoSensor<sup>TM</sup> Yellow/Blue DND-160 are synonyms and can thus be used interchangeably. RatioWorks<sup>TM</sup> PDMPO was used in this protocol.

Citation: Jernej Turnsek Vacuole staining in Phaeodactylum tricornutum using RatioWorks™ PDMPO. protocols.io

dx.doi.org/10.17504/protocols.io.naydafw

Published: 16 Feb 2018

## **Guidelines**

# **Materials**

LysoSensor™ Yellow/Blue DND-160 L7545 by <u>Thermo Fisher Scientific</u> RatioWorks™ PDMPO <u>21204</u> by <u>AAT Bioquest</u>

#### **Protocol**

Prepare 5.46 mM RatioWorks™ PDMPO stock in 100% DMSO.

Step 1.

Dilute 10x with 100% DMSO.

Step 2.

Transfer 500 µL Phaeodactylum tricornutum culture to 1.5 mL epptube.

Step 3.

Add 1 µL 10x RatioWorks™ PDMPO dilution to cells which will yield ~1 µM final concentration.

Step 4.

# Incubate 10 min at room temperature.

# Step 5.

Visualize with 405 nm laser line and emission window set to ~550 nm.

# Step 6.

Note: Leica TCS SP5 confocal microscope was used for images below.

## **EXPECTED RESULTS**





