MitoRed

Red-fluorescent mitochondrial dye

PromoKine

Instruction Manual

Catalog Number	PK-CA707-70055
Description	MitoRed is a far-red fluorescent mitochondrial dye. The staining is dependent on mitochondrial membrane potential, and can be used to detect changes in mitochondrial membrane potential in intact cells. MitoRed is membrane permeable and becomes brightly fluorescent upon accumulation in the mitochondrial membrane. The dye is recommended for use in live cells. Subsequent fixation and permeabilization may reduce or abolish staining.
Quantity	20 x 50 µg
Excitation / Emission Maxima	λabs\λem = 622/648 nm (in methanol)
Molecular Structure	Proprietary
Molecular Weight / Molecular Formula	543.7 Da
Appearance / Formulation / Solubility	Dark blue solid.
Storage & Stability	Store desiccated at -20°C. Protect from light. When stored as recommended product is stable for at least one year from date of receipt.
Applications	To prepare a 200 µM stock solution, dissolved on 50 ug vial in 460 µL anhydrous DMSO or DMF. Stock solution can be stored desiccated in single use aliquots at -20°C, protected from light for at least six months. Staining Protocols: General guidelines for staining cells with MitoRed are provided below. The optimal staining concentration and incubation time may vary by application and cell type. We recommend testing MitoRed at final staining concentrations between 20-200 nM. At higher concentrations, other cellular structures may be stained. Staining of adherent cells: 1. Grow cells on coverslips, chamber slides, or plastic dishes. 2. When cells are at appropriate confluence, remove the medium and add pre-warmed medium containing diluted MitoRed. Alternatively, the probe can be added directly to the current culture medium. 3. Incubate cells for 15-30 minutes or longer at 37°C. 4. Replace the loading solution with fresh medium or PBS and observe cells by fluorescence microscopy. Staining of suspension cells: 1. Pellet cells and aspirate the supernatant. 2. Resuspend the cell pellet in medium containing diluted MitoRed. 3. Incubate for 15-30 minutes or longer at 37°C . 4. Centrifuge the cells and resuspend pellet in fresh medium or PBS and observe cells using a fluorescence microscope or analyze on flow cytometer. Note: If cells are not stained sufficiently, increase the concentration or the incubation time for the dye to accumulate in the mitochondria.

PromoCell GmbH
Sickingenstr. 63/65
69126 Heidelberg
Germany

North America 1 – 866 – 251 – 2860 (toll free)
Deutschland 0800 – 776 66 23 (gebührenfrei)
France 0800 90 93 32 (ligne verte)
United Kingdom 0800 – 96 03 33 (toll free)
Other Countries +49 6221 – 649 34 0

Email: info@promokine.info
www.promokine.info