Product Name: Mitochondrial Tracker (Green)
Catalog No.: RA20021

Basic Information

Product name	Mitochondrial Tracker (Green)
Size	50 μg/20 x 50 μg
Storage	-20℃, keep away from light
Shipping	Shipped with ice pack
Validity	12 months
Ex/Em	490/523nm

Product Introduction

Mitochondrial Tracker (Green) (mitochondrial green fluorescent probe) is a mitochondrial green fluorescent dye that can stain and mark mitochondria at the nanomolar level. The dye has plasma membrane permeability and accumulates on the mitochondrial membrane to show bright fluorescence. The localization of the dye in mitochondria is independent of the mitochondrial membrane potential. The signal-to-noise ratio of stained fixed cells is not ideal. After cell fixation and permeabilization , the fluorescent signal will be weakened or lost, so we recommend that it is only used to stain live cells.

Reagent Preparation

Preparation of stock solution

Prepare 200 μM Mitochondrial Tracker (Green) stock solution: Take a 50 ug tube of Mitochondrial Tracker (Green) dye, add 372 μL of anhydrous DMSO or DMF, and vortex to mix thoroughly. This stock solution is stable at
-20°C for 6 months .
The optimal dye concentration and incubation time vary with cell types. We recommend a working concentration of 20-200 nM for Mitochondrial Tracker (Green).It is easy to stain other cell structures.

Operation Steps

Adherent and suspension cell staining

1. When the cultured cells reach an appropriate density, discard the old culture medium and add Pre-warmed culture medium containing an appropriate concentration of Mitochondrial Tracker (Green).

For suspension cells, centrifuge first, discard the supernatant, and resuspend the cells in new culture medium containing an appropriate concentration of Mitochondrial Tracker (Green).

Note: The medium containing serum cannot be used to dilute the dye, because the dye will be

affected by the oxidase in the serum. We recommend using PBS or basic culture medium to dilute.
2. Incubate at 37°C for 15-45 min.
3. Discard the medium containing Mitochondrial Tracker (Green) and add new medium or PBS to the culture dish (to suspend cells, centrifuge first and discard the upper layer.After clearing the solution, resuspend the cells in new culture medium or PBS).
4. Detect using fluorescence microscopy, flow cytometer or fluorescence microplate reader.

Note

1. All fluorescent dyes have quenching problems. Please try to avoid light to slow down fluorescence quenching.
2. To avoid repeated freezing and thawing, this product can be divided into small quantities.
3. This product is For Research Use Only, Not for Diagnostic Use.