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Lyso Green Kit

1 Components

Component	HY-KD1027-50T
Lyso Green	1 mM × 50 μL
Buffer A	200 μM × 50 μL

2 Introduction

Lyso Green is a fluorescent probe with green fluorescence for specific labeling of lysosomes in living mammalian cells, with strong water solubility and pH stability; it has a maximum excitation wavelength of 490 nm and a maximum emission wavelength of 517 nm. The MCE Lyso Green kit enables the specific labeling of lysosomes in living cells with good labeling and anti-bleaching ability.

3 Characteristics

Maximum excitation wavelength: 490 nm
Maximum emission wavelength: 517 nm
Color: green
Subcellular structural localization: lysosome

4 Self-contained reagents

1. Serum-free cell culture medium
2. PBS buffer

5 Protocol

Preparation of Lyso Green working solution

1. The working concentrations of Lyso Green and Buffer are as follows:

Component	Working Concentration
Lyso Green	5-10 μM
Buffer A	1-2 μM

Note: The probes have been tested on a variety of cell lines such as U-2 OS, COS-7, Hela, etc. However, the optimal working concentration of Buffer is optimized for the U-2 OS cell line, and users can adjust the Buffer dosage according to their own situation when using different cells.

2. Serum-free cell culture medium is required for the preparation of the working solution. For 24- and 48-well plates, the amount of Lyso Green working solution per well is 200 μL and 100 μL, respectively; for 15 mm and 20 mm confocal imaging dishes, the amount of Lyso Green working solution is 100 μL and 200 μL, respectively. The following table can be used to prepare Lyso Green working solution.

Working Solution	Lyso Green	Buffer A	Serum-free medium
100 μL	1 μL	1 μL	98 μL
200 μL	2 μL	2 μL	196 μL

Note: The working solution should cover the cells completely when staining, and the amount of working solution can be adjusted proportionally according to the specific situation.

Lyso Green Incubation Procedure

1. Prepare the cells.
2. Prepare the working solution for incubation.
3. Wash the cells growing in the well plate or confocal dish with appropriate amount of PBS, and then take appropriate amount of serum-free medium to rinse the cell surface once.
4. Add the working solution and incubate the cells with the working solution for 1 h.
5. Take the appropriate amount of PBS and wash 3 times, add the appropriate amount of serum-free medium and leave for 15 min.
6. Take appropriate amount of PBS and wash 3 times, replace with serum cell culture medium and leave for 15 min.
7. Imaging.

6 Storage

-20°C, 1 year

Keep away from light

7 Precautions

1. In order to ensure cell activity and labeling effect, the cell confluence should reach 70%-90% before incubation.
2. The optimal incubation environment for the probe is 37°C, 5% CO_2 cell culture incubator.
3. Fluorescent dyes are subject to fluorescence quenching, so please image as soon as possible after incubation and rinsing.
4. This product is limited to scientific research by professionals and should not be used for clinical diagnosis or treatment, food or medicine.
5. For your safety and health, please wear lab coat and disposable gloves.