

# Tubulin Deep Red Kit

## 1 Components

Component	HY-KD1030-50T
Tubulin Deep Red	1 mM × 50 μL
Buffer A	200 μM × 50 μL

## 2 Introduction

Tubulin Deep Red is a fluorescent probe with red fluorescence that can specifically label microtubules in living mammalian cells, with strong water solubility and pH stability; its maximum excitation wavelength is 652 nm, and its maximum emission wavelength is 674 nm. The MCE Tubulin Deep Red kit can realize the specific labeling of mitochondria in living cells, with good labeling effect and strong anti-bleaching ability.

## 3 Characteristics

Maximum excitation wavelength: 652 nm

Maximum emission wavelength: 674 nm

Color: deep red

Subcellular structural localization: tubulin

## 4 Self-contained reagents

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

## 5 Protocol

Preparation of Tubulin Deep Red working solution

1. The working concentrations of Tubulin Deep Red and Buffer are as follows:

Component	Working Concentration
Tubulin Deep Red	10 μM
Buffer A	1-2 μM

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

Working Solution	Tubulin Deep Red	Buffer A	Serum-free medium
100 $\mu$ L	1 $\mu$ L	1 $\mu$ L	98 $\mu$ L
200 $\mu$ L	2 $\mu$ L	2 $\mu$ L	196 $\mu$ L

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.

#### Tubulin Deep Red 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 appropriate amount of PBS and wash 3 times, replace with serum cell culture medium and leave for 15 min.
6. 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<sub>2</sub> 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.