Tubulin-Tracker Red

T751441

Storage： -20℃. Avoid freeze/thaw cycle. Store in the dark.

Introduction：

Tubulin-Tracker is a fluorescent probe that directly labels α-Tubulin antibodies with different YF dyes. The probe can be selected based on the desired fluorescence properties and is used for direct detection of α-Tubulin in cultured cells or tissue sections.

The α-Tubulin monoclonal antibody labeled with fluorescent dyes can recognize α-Tubulin in samples from various sources, including human, mouse, rat, hamster, dog, etc., making it suitable for a wide range of sample types. Different fluorescent tags on the probes correspond to different excitation/emission wavelengths.

This product is designed for fluorescence detection of microtubules in cells or tissues and can be used for observation under a fluorescence microscope or for detection by flow cytometry. The recommended dilution ratio for use is 1:50 to 1:100, which can be adjusted slightly based on the differences in samples.

Experimental Procedures：

I. Preparation of Probe Working Solution.

Take an appropriate amount of this product and dilute it at a ratio of 1:50 to 1:100 in primary antibody dilution buffer or PBS containing 1–5% BSA and 0.1% Triton X-100. Mix well to obtain the microtubule probe working solution.

II. Fluorescence Staining of Fixed Cells or Tissue Sections.

1. Wash cells or tissue sections twice with PBS.
2. Fix cells or tissue sections with a 3.7% formaldehyde solution prepared in PBS at room temperature for 10–20 minutes.
3. Wash 2–3 times with PBS containing 0.1% Triton X-100, each time for 5 minutes.
4. Add the diluted probe working solution to the sections at a rate of approximately 100 μL per section, and incubate at room temperature in the dark for 30–60 minutes.
5 .Wash 2–4 times with PBS containing 0.1% Triton X-100, each time for 5 minutes.
6. Observe directly under a fluorescence microscope, or mount with an anti-fade mounting medium for storage and observation.

III. Flow Cytometry Detection

1. Collect approximately 200,000–500,000 cells per sample.
2. Wash cells once with PBS.

3. Fix cells with a 3.7% formaldehyde solution prepared in PBS at room temperature for 10–20 minutes.
4. Wash 2–3 times with PBS containing 0.1% Triton X-100, each time for 5 minutes.
5. Resuspend cells in PBS containing 1–5% BSA and 0.1% Triton X-100, and add this product at a ratio of 1:50–100. For example, add 1 μL of this product to 50–100 μL of cell suspension. The dilution ratio can be adjusted appropriately based on the actual staining effect.
6. Incubate at room temperature in the dark for 1 hour.
7. Wash 2–3 times with PBS containing 0.1% Triton X-100, each time for 5 minutes. Flow cytometry analysis can then be performed.

Precautions:

1. Before each use, allow the product to reach room temperature and centrifuge briefly to ensure the liquid is fully settled at the bottom of the tube.
2. If the staining effect is unsatisfactory, increase the concentration of the probe in the staining solution or extend the staining time within the recommended range.
3. Take photos quickly to minimize quenching of the dye due to prolonged exposure.
4. For your safety and health, wear a lab coat and disposable gloves during the operation.