

DAPI Staining Solution (1mg/mL)

Cat #: A-CSH412

Size: 1mL

Storage: -20°C (12 months)

Product Description

DAPI (4',6-Diamidino-2-phenylindole dihydrochloride) is a fluorescent dye that can penetrate intact cell membranes and bind to the majority of A and T bases in DNA. It is commonly used for staining live and fixed cells and for fluorescence microscopy observations. When DAPI binds to double-stranded DNA, it has a maximum absorption wavelength of 358nm and a maximum emission wavelength of 461nm. DAPI emits blue light, and its emission wavelength only partially overlaps with green fluorescent protein (GFP) or Texas Red dye, allowing for multiple fluorescence staining on a single sample.

This product is a water-soluble DAPI solution with a concentration of 1mg/mL. When using, dilute this product to the desired working concentration with the appropriate solvent according to the specific experiment.

Usage

For cultured cells:

1. Take an appropriate amount of DAPI solution and add it to PBS to prepare a DAPI solution with a concentration of 5-15µg/mL.
2. Add the DAPI solution, which is 1/10 of the volume of the culture medium, to the cell culture medium.
3. Incubate the cells at 37°C for 10-20 minutes.
4. Wash the cells twice with PBS or an appropriate buffer.
5. Observe under a fluorescence microscope with an excitation wavelength of 360-400nm.

For tissue sections:

Drop a few drops of diluted DAPI staining solution onto prepared slides, stain for 10 minutes, rinse off the staining solution with running water, remove excess moisture with filter paper, and add a drop of fluorescence mounting medium. Observe under a fluorescence microscope.

Notes

1. The concentration of DAPI Staining Solution (10µg/mL) is suitable for staining difficult cells.
2. Fluorescent dyes are prone to fading, so it is recommended to perform detection as soon as possible after staining.
3. To reduce fluorescence fading, you can use an anti-fade mounting medium.
4. Avoid repeated freezing and thawing, as it may lead to loss of effectiveness.
5. DAPI can be irritating to the human body, so please take appropriate precautions.
6. For your safety and health, please wear a lab coat and disposable gloves when handling.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.