Product Name: **DAPI Nuclear Dye**

Catalog Number: **RA20036**

Basic Information

Product Name	DAPI Nuclear Dye
Size	10mg
Storage conditions	-20 ℃, protected from light
Shipping	Shipped with ice pack
Validity	12 months
Ex/Em	360 / 460 nm

Product Introduction

DAPI is a nuclear staining reagent that can stain DNA. It emits blue fluorescence and its brightness increases by about 20 times after it intercalates into double-stranded DNA. DAPI is commonly used for the detection of apoptosis. After staining, it can be observed with a fluorescence microscope or detected by flow cytometry. DAPI has a high tolerance to photobleaching and can be used to detect mitochondrial DNA in yeast, chloroplast DNA, viral DNA, and chromosomal DNA. At a low concentration (1 μg/mL), DAPI is impermeable to live cells but can be used as a nuclear staining agent for fixed cells or tissue sections. At a high concentration (10 μg/mL), DAPI can be used to stain live cells.

Experimental procedures

For cell or tissue samples, after fixation, wash appropriately to remove the fixative. If immunofluorescence staining is to be performed, DAPI staining should be performed after the staining is completed. If no other staining is required, proceed directly to the subsequent DAPI staining.

1. Dissolve DAPI in ddH2O to prepare a 1 mg/mL DAPI aqueous solution, which was stored at -20°C in the dark.

Note: DAPI cannot be dissolved directly with buffer solutions such as PBS and needs to be dissolved with water first.

2. Take an appropriate amount of DAPI aqueous solution and add it to PBS to prepare a 5 μg/mL DAPI solution.
3. For adherent cells (remove the culture medium from the well plate) or tissue sections, add a small amount of DAPI staining solution to cover the sample. For suspended cells, add at least 3 times the volume of the sample to be stained and mix well.
4. Incubate the cells at room temperature for 10-20 min.
5. Wash the cells twice with PBS or appropriate buffer for 3-5 min each time, and add 50 μL PBS after

washing to prevent the cells from drying out.
6. Observe the cells using a fluorescence microscope with filters set at 360 nm for excitation and 460 nm for emission.

Note: This reagent is for scientific research use only!