

# DAPI

(4', 6-diamidine-2'-phenylindole, dihydrochloride)



**Item No.**  
71-03-00

**Size**  
1.0 mg

Reorder as **Catalog No. 71-03-01**

## DESCRIPTION

DAPI (4',6-diamidine-2'-phenylindole, dihydrochloride) is a fluorescent counterstain which stains the nucleus blue in color. The bright blue fluorescence provides excellent contrast to red fluorochromes such as rhodamine, Cy3, Texas Red, or R-Phycoerythrin.

## FORM/STORAGE

DAPI is supplied as a yellow-orange powder. Store powder at 2-8°C. In powdered form, DAPI is stable for a minimum of 1 year from date of receipt.

## RECONSTITUTION

Reconstitute DAPI powder with 1.0 ml of reagent quality water to a final concentration of 1.0 mg/ml. The reconstituted stock solution should be stored at -20°C and is stable for approximately 6 months.

## APPLICATIONS

DAPI can be used for fluorescent *in situ* hybridization, immunohistochemistry, and flow cytometry.

## SUGGESTED PROTOCOL

The dilutions and staining times stated here are offered as suggestions. Due to individual preference for stain intensity, these parameters should be optimized by the user.

### Fluorescent *In situ* Hybridization/Immunohistochemistry:

1. Detect sample using an appropriate fluorescent conjugate (See KPL catalog).
2. Dilute DAPI stock solution 1:1000 with reagent quality water, (i.e. 1.0 µl DAPI + 999 µl reagent quality water).
3. Apply diluted DAPI generously to the slide and incubate at room temperature for 3-5 minutes in the dark (cover slide with aluminum foil).
4. Rinse the slide for 5-10 seconds in 1X PBS.
5. Mount with KPL's Fluorescent Mounting Media (See RELATED PRODUCTS) or other appropriate mounting media.

## SOLUTION PREPARATION

### PBS:

To 500 ml reagent quality water, add 8.0 g NaCl, 0.2 g KCl, 1.44 g Na<sub>2</sub>HPO<sub>4</sub>, and 0.24 g KH<sub>2</sub>PO<sub>4</sub>. Adjust the pH to 7.4 with HCl. QS to 1 Liter with reagent quality water.

## PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by the Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, flush thoroughly with copious amounts of water.

## RELATED PRODUCTS

Fluorescent Mounting Media	Cat. No. 71-00-16
Cy3 labeled Streptavidin:	Cat. No. 78-30-00
Rhodamine labeled Streptavidin	Cat. No. 073-30-00
Texas Red labeled Streptavidin	Cat. No. 0717-30-00
R-Phycoerythrin labeled Streptavidin	Cat. No. 0718-30-00
Cy3 labeled Avidin	Cat. No. 078-41-00
Propidium Iodide	Cat. No. 71-04-01

See the KPL catalog for a complete list of fluorochrome labeled antibodies and fluorescent *in situ* hybridization systems.

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