Propidium Iodide

<u>Item No.</u> <u>Size</u> 71-04-01 1.0 mg



DESCRIPTION

Propidium Iodide (PI) is a fluorescent nucleic acid dye which binds only to double-stranded nucleic acids. As a nuclear counterstain, propidium iodide stains the nucleus light to dark red in color. The fluorescent red color provides excellent contrast to green or blue fluorochromes such as FITC, Cy2 or AMCA.

FORM/STORAGE

Propidium Iodide is supplied as a dark red powder. Store powder at 2 - 8°C. Stable for a minimum of 1 year from date of receipt when stored at 2 - 8°C.

CONTENT

71-04-01 contains 1 x 1.0 mg/ Catalog No. 71-04-00 - Propidium Iodide

RECONSTITUTION

Reconstitute propidium iodide powder with 3.0 mL of PBS to a final concentration of 0.33 mg/mL. The reconstituted stock solution should be stored at -20°C and is stable for approximately 6 months.

APPLICATIONS

Propidium Iodide 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 the propidium iodide stock solution 1:1000-1:30,000 in 1X PBS.
- 3. Apply diluted propidium iodide 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.

 Mount with KPL's Fluorescent Mounting Media (See RELATED PRODUCTS) or other appropriate mounting media

NOTE: Intense Propidium Iodide staining may mask other florescent signals. It is recommended that the concentration of PI be titrated to determine the optimal dilution.

SOLUTION PREPARATION

PBS: Add 8.0 g NaCl, 0.2 g KCl, 1.44 g Na_2HPO_4 and 0.24 g KH_2PO_4 to 500 mL of reagent quality water. Adjust the pH to 7.4 with HCl. QS to 1 Liter with reagent quality water.

PRODUCT SAFETY AND HANDLING

See MSDS (Material Safety Data Sheet) for this product.

RELATED PRODUCTS

Fluorescent Mounting Media
Cy2-labeled Streptavidin
Cy3-labeled Streptavidin
DAPI
Catalog No. 71-00-16
Catalog No. 077-30-00
Catalog No. 078-30-00
Catalog No. 71-03-01

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

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