



PI Staining Kit

User Manual

Catalog # CRG1016

Used to examine cellular DNA in fluorescent microscopy applications.

For research use only. Not for diagnostic or therapeutic procedures.

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I. INTRODUCTION

Propidium iodide (PI) has been widely used as a fluorescent stain for DNA in cells; it specifically binds double-stranded nucleic acids in apoptosis, necrosis and fixed cells. PI and DNA complex show light red fluorescent color with excitation light 493 nm and emission light 630 nm. It cannot pass through the normal living cells membrane, but it enters the apoptosis, necrosis and fixed cells and binds double-stranded DNA.

This product is 1 mg/ml chromogen. Solute it with suitable density for applies.

Recommend density is 1-5 $\mu\text{g/ml}$.

II. KIT COMPONENTS

Component	Volume	Storage
PI Chromogen (1 mg/ml)	100 μl x 1	-20 °C
Dilution Buffer	20 ml x 1	4 °C
Technical Manual	1 Manual	

III. STORAGE AND STABILITY

Store at 2-8 °C for short time; -20 °C for long time. Each component is stable for up to 12 months.

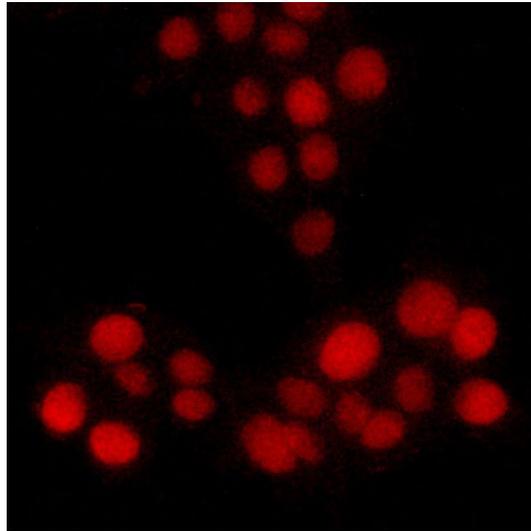
IV. PROCEDURE

1. For double or triple fluorescence staining in immunofluorescence tests, the PI staining is the last step after all fluorescence antibodies incubation;
2. For culture cell, add 10 μ l Chromogen to 2 ml Dilution Buffer in tube and mix (the end density is 5 μ g/ml); incubate about 5 minutes in a dark incubator, at 30 °C; and then wash it with PBS/TBS 3 times for 3 minutes each time;
3. Observation with the fluorescence microscope.

Note:

1. PI is a possible carcinogen, operation with gloves;
2. The PI is faded with light; all experiment process need keep away from light.

V. DATA



Immunofluorescent analysis staining in PC12 cells. Methanol-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5 - 10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST at room temperature in the dark. PI was used to stain the cell nuclei (red).

VI. TECHNICAL SUPPORT

For troubleshooting, information or assistance, please go online to www.cohesionbio.com or contact us at techsupport@cohesionbio.com

VII. NOTES