

Product Information

Propidium Iodide (PI)

Catalog Number: P4034

Product Size: 50 mg

Parameters

Appearance: Orange-red solid soluble in water or DMSO

$\lambda_{Ex}/\lambda_{Em}$ (binding DNA)=535/617 nm

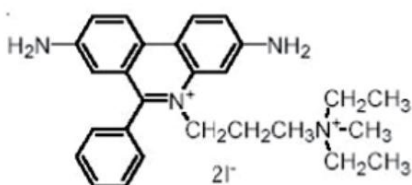
$\lambda_{Ex}/\lambda_{Em}$ (unbound DNA) = 493/636 nm

CAS No.: 25535-16-4

Molecular Formula: $C_{27}H_{34}I_2N_4$

Molecular Weight: 668.40

Molecular Structure:



Storage

Store at 4°C and protect from light. When stored as directed, product is stable for at least 12 months.

Description

Propidium iodide (PI) is a nucleic acid fluorescent dye that does not penetrate the intact cell membrane but is capable of staining the nucleus through the cell membrane of dead cells and advanced cells of apoptosis. Therefore, PI is often used as a

fluorescent probe for the detection of apoptosis or necrosis. In flow cytometry, PI is often used in combination with other dyes such as Calcein-AM, Hoechst 33258, or Hoechst 33342 to distinguish between early and late apoptotic cells as well as dead cells. In addition, PI is often used as a counterstain for multicolor fluorescent dyeing.

Protocol

1. Prepare a 10-50 μ M PI solution in PBS or an appropriate buffer.
2. Add 1/10 medium volume of PI solution to the cell culture medium (you can also use 1/10 concentration of PI buffer instead of medium).
3. Incubate the cells for 10-20 min at 37 ° C .
4. Wash the cells twice with PBS or a suitable buffer.
5. Observe the cells with a fluorescence microscope at 535 nm excitation wavelength and 615 nm emission wavelength filter.

Notes

1. Irritating to the human body, please pay attention to proper protection.
2. For your safety and health, please wear lab coats and disposable gloves.

