

# Propidium Iodide Solution

Cat No. CH-M-178

Size: 1ml

Concentration: 1mg/ml

Store at -20°C

**MOLEQULE-ON**<sup>®</sup>

## Description

Propidium iodide (PI) binds to DNA by intercalating between the bases with little or no sequence preference and with a stoichiometry of one dye per 4–5 base pairs of DNA. PI is suitable for fluorescence microscopy, confocal laser scanning microscopy, flow cytometry, and fluorometry. PI is membrane impermeant and generally excluded from viable cells. PI is commonly used for identifying dead cells in a population and as a counterstain in multicolor fluorescent techniques. It is often used in conjunction with fluorescent probes such as calcein-am or FDA to identify living and dead cells. The excitation and emission wavelengths of the pi-dna complex were 535 nm and 615 nm respectively.

This product is an aqueous solution of PI with a concentration of 1mg/ml. Diluted to proper working concentration according to different experiments.

## Protocol (Cell Staining)

1. Add appropriate amount of PI aqueous solution to PBS to prepare 10-50  $\mu\text{M}$  (6.7-33.4  $\mu\text{g/ml}$ ) PI solution.
2. Add 0.1 volume PI solution to 0.9 volume cell culture medium.
3. Incubate at 37°C for 10-20 min.
4. Wash twice with PBS or appropriate buffer.
5. Observation with fluorescence microscope, Ex=535 nm Em=615 nm.

## Notes

- PI is generally considered carcinogenic and should be handled with gloves to avoid cross-contamination.
- This product needs to avoid light, and do not repeated freezing and thawing.