

Propidium iodide *1 mg/mL aqueous solution*

Catalog Number: 17585, 17586

Unit Size: 5 mL, 10 mL

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	6 months upon receiving

Chemical Properties

Appearance	Liquid red
Molecular Weight	668.39
Soluble In	Water
Chemical Structure	

Spectral Properties

Excitation Wavelength	537 nm
Emission Wavelength	618 nm

Applications

Propidium iodide (PI) belongs to the same chemical class of ethidium bromide. As in the case of ethidium bromide its fluorescence is enhanced for 20-30-fold upon binding to nucleic acids. The fluorescence excitation maximum is red-shifted for 30-40 nm and the fluorescence emission maximum blue-shifted for 15 nm or so. PI also binds to RNA as DAPI and acridine orange. PI is commonly used for identifying dead cells in a population of cells and as a counterstain in multicolor fluorescent techniques. It can also be used to differentiate necrotic, apoptotic and normal cells. It is suitable for fluorescence microscopy, flow cytometry and fluorometry.