

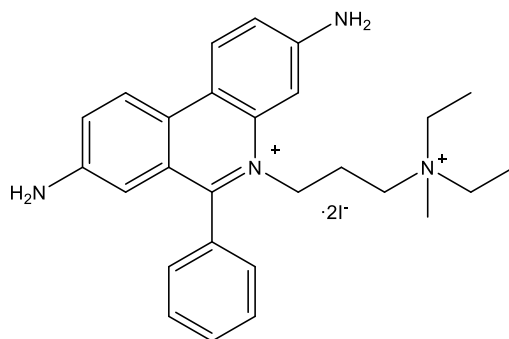
**Catalog # 10-5165**

**Propidium Iodide**

CAS# 25535-16-4

3,8-Diamino-5-[3-(diethylmethylammonio)propyl]-6-phenylphenanthridinium diiodide

Lot # X102357



Propidium iodide is a red fluorescent DNA stain.<sup>1,2</sup> Membrane impermeable to live cells but permeable to dead or damaged cells and thus may be used for identifying cell viability or as a counterstain.<sup>3,4</sup> Binds to DNA by intercalation and is suitable for fluorescence microscopy and flow cytometry.<sup>2</sup> Ex.: 488-535 nm and Em.: 617 nm.

- 1) Coder *et al.* (1997), *Assessment of cell viability*, Curr. Protoc. Cytom., **Suppl. 15**
- 2) Edwards *et al.* (2007), *High-throughput cytotoxicity screening by propidium iodide staining*; Curr. Protoc. Cytom., **Unit 9.24**
- 3) Sawai and Domae (2011), *Discrimination between primary necrosis and apoptosis by necrostatin-1 in Annexin V-positive/propidium iodide-negative cells*; Biochem. Biophys. Res. Commun., **411** 569
- 4) Pizato *et al.* (2018), *Omega-3 docosahexaenoic acid induces pyroptosis cell death in triple-negative breast cancer cells*; Sci. Rep., **8** 1952

**PHYSICAL DATA**

Molecular Weight:	668.39
Molecular Formula:	C <sub>27</sub> H <sub>34</sub> I <sub>2</sub> N <sub>4</sub>
Purity:	>95% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (2.5 mg/ml); water (3 mg/ml)
Physical Description:	Red solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or water may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**