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## Propidium Iodide Solution

**Catalog # / Size:** 2706505 / 2 ml

**Isotype:**

**Formulation:** Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5

## Applications:

**Applications:** Flow Cytometry

**Recommended Usage:** The suggested use of this solution for viability staining is 10 µL per million cells in 0.5 ml/test, and incubate for 15 minutes at 4 °C before analysis. For Cell Cycle analysis, please see our Propidium Iodide Cell Cycle Staining Protocol.  
**Caution:** This solution is *toxigenic* and *mutagenic*; handle with care.

**Application Notes:** Propidium Iodide Solution can be used in evaluation of apoptosis, cell viability and cell cycle analysis by flow cytometry.

**Application References:**

1. Vermes I, *et al.* 1995. *J. Immunol. Methods* 184:39.
2. Darzynkiewicz Z, *et al.* 1992. *Cytometry* 13(8):795.
3. Douglas RS, *et al.* 1995. *J. Immunol. Methods* 188:219.
4. Sakimoto I, *et al.* 2006. *Cancer Research* 66:2287. [PubMed](#)
5. Liu H, *et al.* 2012. *Int J Biochem Cell Biol.* 45:408. [PubMed](#)
6. Juel HB, *et al.* 2013. *PLoS One.* 8:64619. [PubMed](#)
7. Ren Q, *et al.* 2013. *PLoS One.* 8:74732. [PubMed](#)
8. Zhao W, *et al.* 2013. *Clin Immunol.* 149:119. [PubMed](#)
9. Beggs KM, *et al.* 2014. *Toxicol Sci.* 137:91. [PubMed](#)
10. Ewald SE, *et al.* 2014. *Infect Immun.* 82:460. [PubMed](#)
11. Tsou WI, *et al.* 2014. *J Biol Chem.* 289:25750. [PubMed](#)
12. Kong S, *et al.* 2014. *J Immunol.* 193:5515. [PubMed](#)

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**Description:** Propidium iodide (PI) is a fluorescent dye that binds to DNA. When excited by 488nm laser light, it can be detected with in the PE/Texas Red® channel with a bandpass filter 610/10. It is commonly used in evaluation of cell viability or DNA content in cell cycle analysis by flow cytometry.