Store at 4°C

PI/RNase Staining Solution

Catalog Number	Vial Size
CY2001-O	25 mL/50 tests
CY2001-P	50 mL/100 tests

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精准 高效 稳定 Precision Efficient Stable

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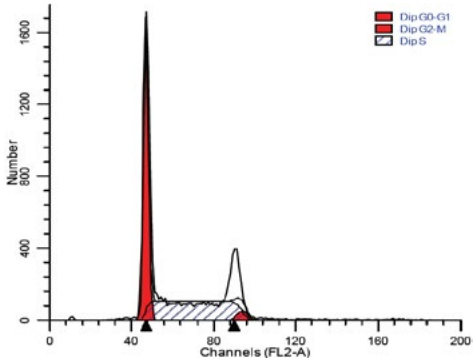
Important Note: This product is guaranteed up to one year from purchase.

Description

Propidium Iodide (PI) is a fluorescent vital dye that stains DNA and RNA. PI binds to both DNA and RNA, so the latter must be removed by digestion with ribonucleases. The content of DNA as determined by flow cytometry, can reveal useful information about the cell cycle and the proteins involved in the regulation of the cell cycle. Cells in G2 and M phases of the cell cycle have double the DNA content of those in G0 and G1 phases. Cells in S phase have a DNA content lying between these extremes. PI is detected in the orange range of the spectrum using a 562-588 nm band pass filter. This reagent may be used to analyze cell cycle by flow cytometry in addition to use with antibodies for examining the expression of proteins during the cell cycle.

Illustration of Immunofluorescent Staining



Jurkat cells were fixed with cold 70% ethanol and wash twice with cold PBS. Cells were stained with 0.5 mL PI/RNase Staining Solution for 30 minutes at room temperature and analyzed by flow cytometry.

Suggested Staining Protocol (1 test)

1.Harvest cell and adjust cell number to 1×10^6.
2.Fix cells with cold 70% ethanol for 1 hour at room temperature (or 2-8°C overnight).
3.Wash cells twice with cold PBS.
4.Resuspend cells with 0.5 ml PI/RNase Staining Solution.
5.Gently vortex and incubate for 30 minutes in room temperature, protected from light.
6.Analyze by flow cytometry.

Product Information

Storage: Store at 4°C and protected from prolonged exposure to light. **Do not freeze.**

Application: Flow cytometry

Formulation: PBS pH 7.2, 0.09% NaN_3

Usage: This reagent is used to analyze cell cycle by flow cytometry. It does not require dilution. Use 0.5 ml /test (1×10^6 cells) and incubate for 30 minutes at room temperature before analysis.

References

[1] Douglas RS, Tarshis AD, Pletcher CH Jr, Nowell PC, Moore JS. A simplified method for the coordinate examination of apoptosis and surface phenotype of murine lymphocytes. J Immunol Methods. 1995; 188(2):219-228. (Biology)
[2] Kalejta RF, Shenk T, Beavis AJ. Use of a membrane-localized green fluorescent protein allows simultaneous identification of transfected cells and cell cycle analysis by flow cytometry. Cytometry. 1997; 29(4):286-291. (Biology)

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