

Product datasheet

Propidium Iodide ab14083

12 References 2 图像

概述

产品名称 Propidium Iodide

产品概述 Propidium Iodide (PI) binds to double-stranded DNA. PI cannot cross intact plasma membrane and therefore will only be present in DNA of cells where the plasma membrane has been compromised/ permeabilized.

For Microscopy analysis: PI can be viewed using rhodamine(red) filter (?= 536/617). Cells will only be stained if the membrane has been permeated, either naturally (non-viable cells) or with detergents (for fluorescent staining).

Flow Cytometry analysis: PI staining can be monitored in FL2 (DNA content) or FL3 (viability) channel.

If used together as control for Annexin V assays [ab14082](#), [ab14083](#) or [ab14152](#), PI should be diluted to 250 µg/ml solution (in PBS) prior use and added as 1 µl/ Annexin V Assay (0.25µg/assay).

Visit our [FAQs page](#) for tips and troubleshooting.

经测试应用 适用于: FM

性能

存放说明 Store at +4°C. Please refer to protocols.

组件	标识符	1 ml
Propidium Iodide (1mg/ml)	ab14083	1 x 1ml

相关性 Propidium Iodide (PI) (MW=668.4 Da) is an intercalating agent and a fluorescent molecule which is membrane impermeant and generally excluded from viable cells. Upon entering cells, PI will bind to DNA and RNA by intercalating between bases. Once bound to the nucleic acids, its fluorescence is enhanced 20- to 30-fold. $Ex_{max}= 536nm$ / $Em_{max}= 617 nm$.

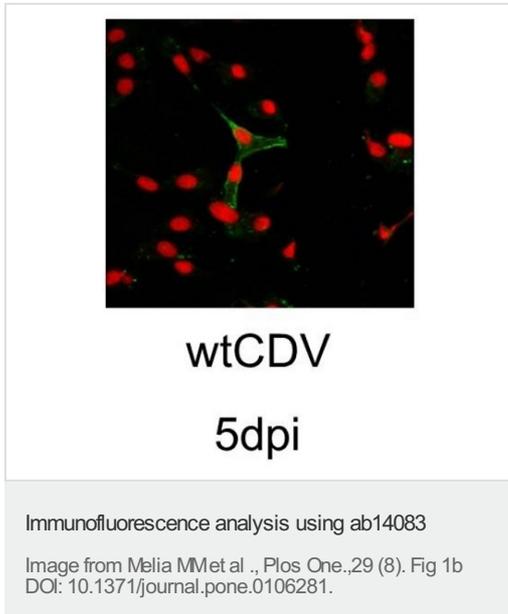
应用

Our [Abpromise guarantee](#) covers the use of **ab14083** in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

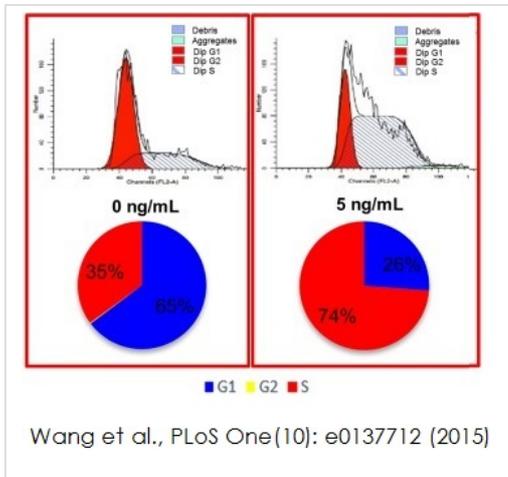
应用	Ab评论	说明
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FM Use at an assay dependent concentration.

图片



Vero-DogSLAM (VDS) cells and Vero (African Green Monkey kidney) cells were infected with wtCDV. Cells were fixed, permeabilised and stained with SSPE serum and rabbit anti-human FITC; nuclei were stained using ab14083 propidium iodide. Images were taken using a Nikon Eclipse TE2000-U UV microscope (x400).



Wang et al. used ab14083 to investigate an optimized platform for maintaining proliferation of giant panda mesenchymal stem cells (MSCs). MSCs were fixed in 70% alcohol and 30% PBS at 4°C for 1 hour. Cells are then incubated in the dark with PBS, 20µg/ml propidium iodide (ab14083) and 1% RNaseA for 30 minutes at 37°C. Cell samples are resuspended in PBS and analyzed using FACS Calibur flow cytometry.

Flow cytometry: ab14083

Image from Wang et al., PLoS One., 10(9). Fig 3a & c. doi:10.1371/journal.pone.0137712

Flow cytometry analysis shows the cells are at different cell cycle stages in different concentrations (0ng/ml and 5ng/ml respectively) of basic fibroblast growth factor (bFGF).

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