abcam

Product datasheet

Propidium Iodide ab14083

50 References 2 图像

产**品名称** Propidium lodide

产品概述 Propidium lodide (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 (λ = 536/617). Cells will only be stained if the membrane has been permeated, either naturally (non-viable cells) or with

detergents (for fluorescent staining).

For Flow Cytometry analysis: PI staining can be monitored in FL2 channel.

If used together as control for Annexin V assays ab14082, ab14083 or ab14152, PI should be

diluted to 250 $\mu g/ml$ solution (in PBS) prior use and added as 1 $\mu l/$ Annexin V Assay

(0.25µg/assay).

Visit our **FAQs page** for tips and troubleshooting.

This product is manufactured by BioVision, an Abcam company and was previously called 1056

Propidium lodide. 1056-1 is the same size as the 1 ml size of ab14083.

经测试应用 **适用于:** FM, Flow Cyt

性能

说明

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

组 件	标识符	1 ml
Propidium lodide (1mg/ml)	ab14083	1 x 1ml

相关性

Propidium lodide (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.

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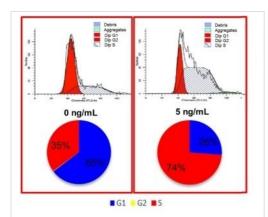
The Abpromise guarantee

Abpromise™承诺保证使用ab14083于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

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

图片



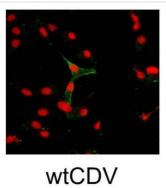
Wang et al., PLoS One(10): e0137712 (2015)

Flow cytometry: ab14083

Image from Wang et al., PLoS One., 10(9). Fig 3a & c. doi:10.1371/journal.pone.0137712 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

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, $20\mu g/ml$ 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 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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5dpi

Immunofluorescence analysis using ab14083

Image from Melia MMet al., Plos One.,29 (8). Fig 1b DOI: 10.1371/journal.pone.0106281. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

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).

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