abcam

Product datasheet

Propidium Iodide ab14083

50 References 画像数 2

製品の概要

製品名 Propidium Iodide

製品の概要 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 (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 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.

特記事項 This product is manufactured by BioVision, an Abcam company and was previously called 1056 Propidium Iodide. 1056-1 is the same size as the 1 ml size of ab14083.

アプリケーション **適用あり:** FM, Flow Cyt

製品の特性

保存方法 Store at +4°C. Please refer to protocols.

内容	ラベル	1 ml
Propidium Iodide (1mg/ml)	ab14083	1 x 1ml

関連性 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.

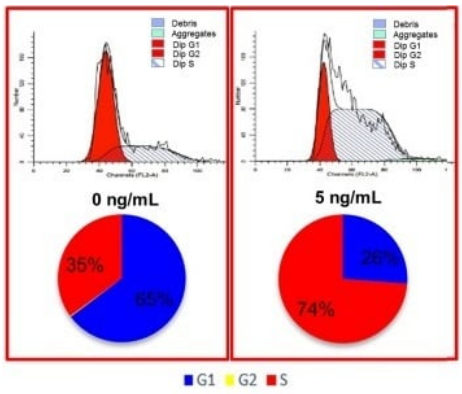
アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab14083の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
FM		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.

画像

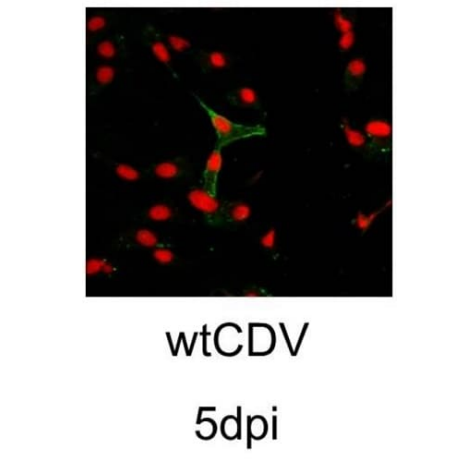


Flow cytometry: ab14083

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, 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 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).



Immunofluorescence analysis using ab14083

Image from Melia MM et 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).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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