

Product datasheet

DRAQ7™ ab109202

★★★★★ 1 Abreviews 16 References 3 Images

Overview

Product name	DRAQ7™
Description	DRAQ7™
Tested applications	Suitable for: FM, Flow Cyt, ICC/IF
General notes	<p>DRAQ7™ is a far-red fluorescent dye that <i>only</i> stains the nuclei in dead and permeabilized cells and can be used in combination with common labels such as GFP or FITC.</p> <p>DRAQ7 is the ideal tool to study dead or membrane-compromised cells because it does not enter intact, live cells. It is an ideal replacement for propidium iodide and 7-AAD, as is not excited by UV light and has no emission overlap with PE / PE homologues.</p> <p>Key features of DRAQ7 include:</p> <ul style="list-style-type: none"> Rapid staining of dsDNA/ nuclei of dead or permeabilized cells Low photobleaching It can be used in most cell types, eukaryotic and prokaryotic: mammalian, bacterial, parasitic, plant, etc ... Non-toxic in long-term culture Can be combined with "live" dyes No compensation needed with common FITC/GFP + PE combinations in flow cytometry No wash or RNase treatment needed. <p>SPECTRAL PROPERTIES</p> <p>Excitation:</p> <ul style="list-style-type: none"> 633 and 647 nm line optimal (Ex_{max} 599 / 644 nm) 488, 514 and 568 nm lines, sub-optimal (only by flow cytometry) <p>Emission (instrument dependent):</p> <ul style="list-style-type: none"> 665 nm to infra-red max 678 nm / 697 nm intercalated with dsDNA) Minimal overlap with vis range e.g. GFP and FITC Em. filters may include 695L, 715LP or 780 LP <p>Multi-wavelength imaging with UV / vis fluorochromes</p> <ul style="list-style-type: none"> No fluorescence enhancement upon DNA binding Low photo-bleaching effect Compatible with optics of flow, laser scanning cytometers and confocal and lamp-based fluorescence microscopes

Properties

Form	Liquid
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Storage instructions

Store at +4°C. Do Not Freeze. Store In the Dark.

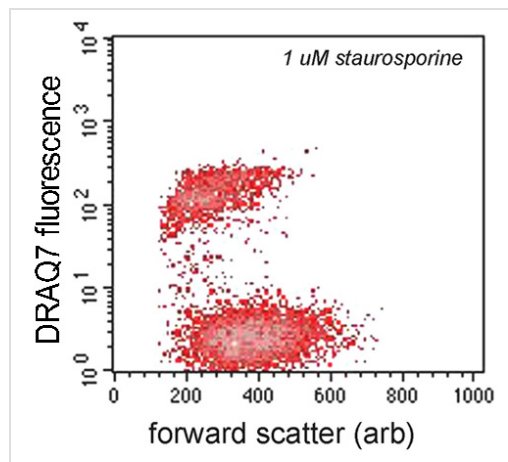
Applications

Our [Abpromise guarantee](#) covers the use of **ab109202** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

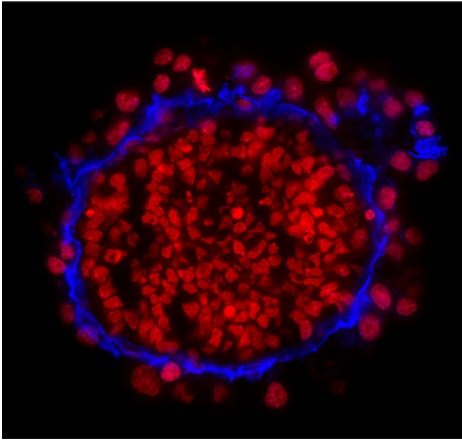
Application	Abreviews	Notes
FM		Use at an assay dependent concentration.
Flow Cyt		1/100. (final concentration = 3µM)
ICC/IF		1/100. (final concentration = 3µM) It is highly recommended that the concentration and labelling conditions are carefully determined by each investigator for optimal performance in the assay of interest. For more specific information about the applications, please refer to the Protocol Booklet.

Images



Jurkat cells exposed to 1µM staurosporine for 24 hours show DRAQ7™ staining (top half of the plot). These cells have compromised membranes that allow entry of DRAQ7™ in the cells.

Flow Cytometry - DRAQ7™ (ab109202)



Immunohistochemistry (Frozen sections) -

DRAQ7™ (ab109202)

Courtesy of Dr. Shaohua Li, UMDNJ-Robert Wood Johnson Medical School

Sample: mouse embryonic stem cell-differentiated embryoid bodies (EBs)

Preparation:

Fix in 3%PFA in PBS for 30 min at RT

Incubate in 7.5% sucrose-PBS for 3h at RT

Incubate in 15% sucrose-PBS at 4 degree Celsius overnight

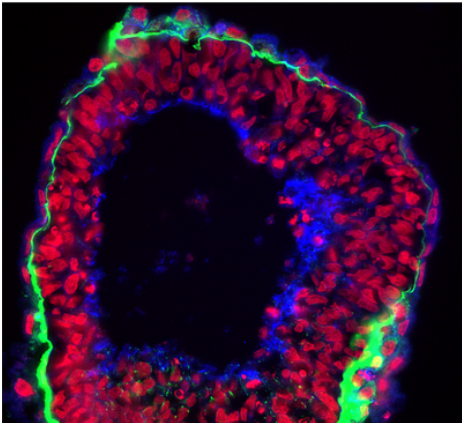
Embed the EBs in tissue-Tek OCT compound

Cut frozen sections to 4-20 μm thickness

Primary antibody: Rabbit anti-laminin alpha 1, 1:400

Secondary antibody: [Goat anti-rabbit IgG - H&L \(AMCA\) \(ab123435\)](#)

Nuclei were counterstained stained with DRAQ7™ (ab109202)



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Primary antibody: Rabbit anti-laminin alpha 1, 1:400

Secondary antibody: [Goat polyclonal Secondary Antibody to Rabbit IgG - H&L \(FITC\) \(ab97050\)](#), 1:200

[F-actin was stained with CytoPainter F-actin staining kit \(blue\) \(ab112124\)](#), 1:1000

Nuclei were counterstained stained with DRAQ7™, 1:1000

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

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