

## ab138905

# **Nuclear Green DCS1**

Instructions for Use

For staining DNA in cells

This product is for research use only and is not intended for diagnostic use.

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## 1. Biological Applications

ab138905 Nuclear Green DCS1 is a non-fluorescent, DNA-selective and cell impermeant green fluorescent dye for analyzing DNA content in dead cells. The Nuclear Green DCS1 has its fluorescence significantly enhanced upon binding to double-stranded DNA. It can be used in fluorescence imaging, microplate and flow cytometry applications. This DNA-binding dye might be used for multicolor analysis of dead cells.

### 2. Spectral Properties

Ex/Em = 515/530 nm

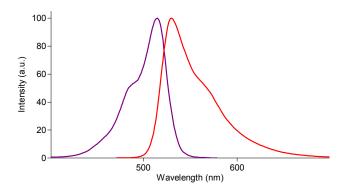


Figure 1. Excitation and emission spectra for the Nuclear Green DCS1 bound to DNA in PBS (pH 7.4).

## 3. Sample Protocol for Cell Staining

Caution: The following protocol can be adapted for most cell types. Growth medium, cell density, the presence of other cell types and factors may influence staining. Residual detergent on glassware may also affect staining of many organisms, and cause brightly stained material to appear in solutions with or without cells present.

- Add Nuclear Green DCS1 (2 to 10 μM) into the fixed, dead or apoptotic cells (either suspension or adherent) and stain the cells for 15 to 60 minutes. In initial experiments, it may be best to try several dye concentrations to determine the optimal concentration that yields the desired result. High dye concentration tends to cause nonspecific staining of other cellular structures.
- Directly analyze the cellular staining with a fluorescence microscope, a fluorescence microplate reader, or flow cytometery.

For further technical questions please do not hesitate to contact us by email (<a href="mailto:technical@abcam.com">technical@abcam.com</a>) or phone (select "contact us" on <a href="www.abcam.com">www.abcam.com</a> for the phone number for your region).



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