

PRODUCT INFORMATION



Nuclear Green™ DCS1

Item No. 25171

Ex./Em. Max: 503/526 nm
Supplied as: A solution in DMSO
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Nuclear Green™ DCS1 is a DNA-selective, cell-impermeant dye that is used to label DNA content in live or fixed necrotic and apoptotic cells. Upon binding to double-stranded DNA, Nuclear Green™ DCS1 fluoresces, and this fluorescence can be measured using fluorescence microscopy, microplate fluorometry, or flow cytometry. It has been used to label necrotic and apoptotic bovine monocyte-derived macrophages (bMDM) following infection with *M. bovis* AF2122.¹ Nuclear Green™ DCS1 displays excitation/emission maxima of 503/526 nm, respectively.

Assay Protocol

1. Add Nuclear Green™ DCS1 to suspension or adherent cells to a final concentration of 2 to 10 μM and stain the cells for 15 to 60 minutes.
2. Observe cells using fluorescence technique of choice.

Note 1: Aliquot and store unused Nuclear Green™ DCS1 at -20° C. Nuclear Green™ DCS1 is light sensitive. Light exposure and repeated freeze-thaw cycles should be avoided.

Note 2: The optimal working concentration is application specific. Staining conditions may be modified according to growth medium and/or cell density. The presence of residual detergent on glassware may also affect staining.

Reference

1. Jensen, K., Gallagher, I.J., Johnston, N., *et al.* Variation in the early host-pathogen interaction of bovine macrophages with divergent *Mycobacterium bovis* strains in the United Kingdom. *Infect. Immun.* **86**(3), e00385-e00417 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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