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MycoLight™ Green JJ98 *5 mM in DMSO*

Table 1 Contents and storage

Material	Amount	Storage	Stability
MycoLight™ Green JJ98	1 vial (100 µL- 5 mM)	• ≤ –20°C • Desiccate • Protect from light	
Spectral characteristic of the fluorescent probe: **Ex~488nm, Em~530nm**			

Introduction

MycoLight™ Green JJ98 is a green-fluorescent nuclear and chromosome stain that is permeant to both prokaryotic and eukaryotic cell membranes. MycoLight™ Green JJ98 has a high affinity for DNA, and exhibits enhanced fluorescence upon binding with an excitation maximum close to the 488 nm argon laser line and fluorescence emission maximum at ~500 nm. MycoLight™ Green JJ98 is particularly useful as a nuclear counterstain for bacterial assays since it stains both live and dead gram-positive and gram-negative bacteria. It is an excellent replacement for SYTO® 9 (SYTO® is the trademark of Invitrogen).

Guidelines for Use

The following protocol can be adapted for most cell types. These conditions require adjustment for each cell type and experimental system. 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. Use plastic tubes when diluting MycoLight™ Green JJ98, because the diluted stain adheres to glass. In general, the best results are obtained in buffers that do not contain phosphate.Suggested conditions for staining cells with MycoLight ™ Green JJ98. Application Concentration Staining Conditions Bacterial cells 50 nM –20 µM Vortex to mix, then incubate for 1–30 minutes. Eukaryotic cells 10 nM–5µM Incubate for 10 – 120 minutes. Microarrays 50 nM in TE buffer Incubate for 5 minutes, rinse and then dry.

Experiment procedure

1. Adherent cells in culture may be stained in situ on coverslips. Pellet cells in suspension by centrifugation and resuspend in buffered salt solution or water.
2. Dilute the MycoLight™ Green JJ98 with non-phosphate buffer such as Hepes buffer or buffer of your choice. Add MycoLight™ Green JJ98 using the concentrations listed in Table 1 as a guideline. Note In initial experiments, it may be best to try several dye concentrations over the entire suggested range to determine the concentration that yields optimal staining.
3. Stained eukaryotic cells generally show diffuse cytoplasmic staining as well as nuclear staining. Particularly MycoLight™ Green JJ98 show intense staining of intranuclear bodies frequently

Fluorescence Data

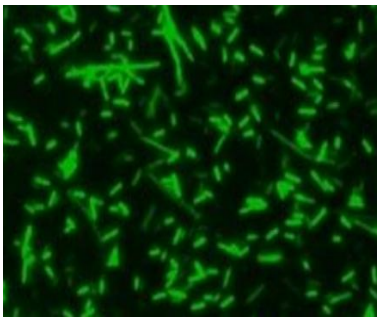

Figure 1. E.Coli were stained with 5 uM of

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MycoLight™ Green JJ98 for 30 minutes and imaged with FITC channel.