Gelite™ Green Nucleic Acid Gel Staining Kit

Catalog number: 17589
Unit size: 1 Kit

Component	Storage	Amount
Component A: Gelite™ Green Stain	Freeze (<-15 °C), Avoid Light	20 µL
Component B: 5X Gel Loading Buffer	Freeze (<-15 °C), Avoid Light	3 x 1 mL

OVERVIEW

Gelite™ Green is a sensitive fluorescent nucleic acid gel stain for detecting nucleic acids in agarose and polyacrylamide gels. Gelite™ Green stain exhibits exceptional affinity for DNA and a large fluorescence enhancement upon binding to DNA, at least an order of magnitude greater than that of ethidium bromide when detected by photography. With a standard 300 nm UV transilluminator and photographic detection, as little as 60 pg dsDNA per band can be detected with Gelite™ Green stain. Gelite™ Green nucleic acid gel stain is nearly two orders of magnitude more sensitive than ethidium bromide for staining oligonucleotides in gels. Our Gelite™ Green Nucleic Acid Gel Staining Gel Kit includes our Gelite™ Green nucleic acid stain with an optimized and robust protocol. It provides a convenient solution for staining nucleic acid samples in gels.

KEY PARAMETERS

Instrument:	Transilluminator
Excitation:	254 nm or 300 nm
Emission:	Long path green filter (ex. SYBR or GelStar)

PREPARATION OF WORKING SOLUTION

Add 1 µL of Gelite™ Green Stain (Component A) into 200 µL of 5X Gel Loading Buffer (Component B) to make Gelite™ Green working solution. Protect Gelite™ Green working solution from light by covering it with foil or placing it in the dark.

SAMPLE EXPERIMENTAL PROTOCOL

1. Prepare DNA samples as you desired.
2. Add 4 µL of Gelite™ Green working solution into 16 µL of DNA samples and mix well. Incubate at room temperature for 5 - 15 minutes prior to electrophoresis.
3. Run gels based on your standard protocol.
4. Image the gel with a 300 nm ultraviolet or 254 nm transilluminator, or a laser-based gel scanner using a long path green filter such as a SYBR® filter or GelStar® filter.

EXAMPLE DATA ANALYSIS AND FIGURES

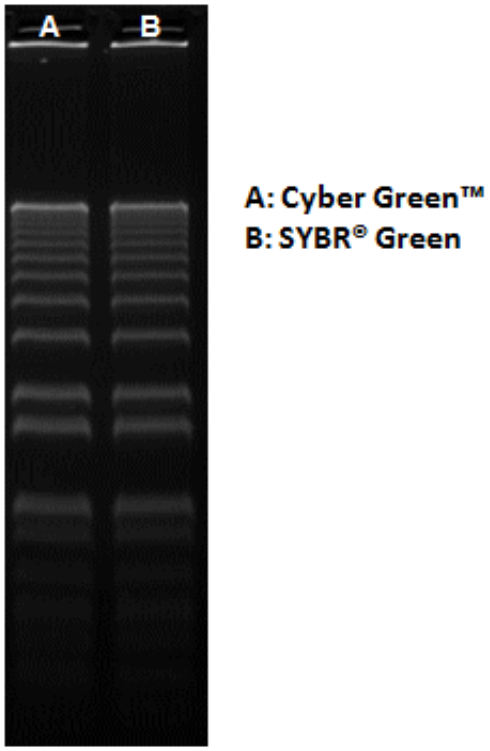

Figure 1.

160 ng of 1 kb Plus DNA Ladder (ThermoFisher 10787018) in 0.9% agarose/TBE electrophoresis gel were stained with Cyber Green™ and SYBR® Green, and imaged with 254-nm UV transilluminator using UVP Bioimaging System.

DISCLAIMER

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