

Gelite™ Green Nucleic Acid Gel Staining Kit

 Catalog number: 17589
 Unit size: 1 Kit

Component	Storage	Amount
Component A: Gelite™ Green Stain	Room temperature (10-25 °C), Minimize light exposure	1 vial (20 µL)
Component B: 5X Gel Loading Buffer	Room temperature (10-25 °C), Minimize light exposure	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
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.

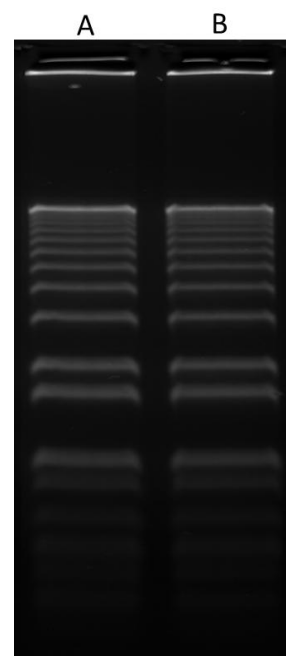
EXAMPLE DATA ANALYSIS AND FIGURES


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

DISCLAIMER

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