

Gelite™ Orange Nucleic Acid Gel Staining Kit

 Catalog number: 17594
 Unit size: 1 Kit

Component	Storage	Amount
Component A: Gelite™ Orange 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™ Orange is an extremely sensitive nucleic acid gel stain for detecting DNA or RNA in gels using a standard 300 nm UV transilluminator and Polaroid 667 black-and-white print film. As with Helixyte™ Green stain, this remarkable sensitivity can be attributed to a combination of unique dye characteristics. Because the nucleic acid-bound Gelite™ Orange dye exhibits excitation maxima at both ~495 nm and ~300 nm (the emission maximum is ~537 nm), it is compatible with a wide variety of instrumentation, ranging from UV epi- and transilluminators and blue-light transilluminators, to mercury-arc lamp- and argon-ion laser-based gel scanners. Our Gelite™ Orange Nucleic Acid Gel Staining Gel Kit includes our Gelite™ Orange 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)

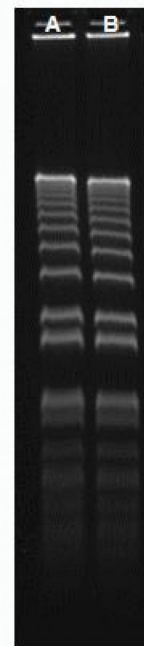
PREPARATION OF WORKING SOLUTION

Add 1 µL of Gelite™ Orange (Component A) into 200 µL of 5X Gel Loading Buffer (Component B). Protect the 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™ Orange 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



A: Gelite™ Orange
B: SYBR® Gold

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

DISCLAIMER

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