

Updated: October 11, 2025

# GelViewer Nucleic Acid Gel Stains, 10,000 imes

Cat. No.	Product	Spec.
FLD0703	GelViewer, 10,000 $ imes$ in water	0.5 mL
FLD0703-1	GelViewer, 10,000 $ imes$ in water	1 mL

### Storage and Handling

- GelViewer is a thermal stable dye.10,000 × solution and dilute solution can be stored at room temperature, protected from light, at least one year after receipt.
- If dye precipitation occurs at lower temperatures, warm the solution to 45-50°C for one to two minutes and mix thoroughly to redissolve.

# **Product Description**

GelViewer is a highly sensitive, stable, low-toxicity fluorescent nucleic acid dye for staining dsDNA, ssDNA and RNA in agarose or polyacrylamide gels. It is a safer and more effective alternative to ethidium bromide (EtBr). GelViewer delivers excellent band visualization under both UV transilluminator and blue-light imagers, such as blue LED lightboxes. Using blue light minimizes DNA damage and protect users from UV exposure. GelViewer supports both ingel staining (precast method) and post-staining, and is fully compatible with downstream applications, including gel purification, restriction digest, sequencing, and cloning. For the complete safety report, please visit www.msbiox.com.

## **Spectral Profile**

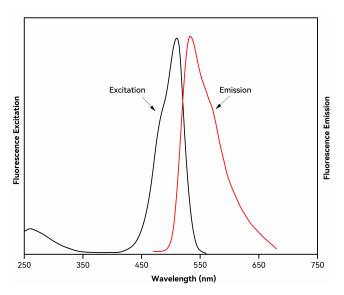


Figure 1: Excitation and emission spectra of GelViewer nucleic acid gel stain.

### **General Considerations**

 GelViewer can be used in both in-gel staining protocol and poststaining protocol. Post-staining generally provides higher sensitivity and is recommended for detecting low DNA concentrations. In-gel staining is not recommended for use with polyacrylamide gels.

- DNA bands can be visualized using UV light (254 nm) or visible blue light. Blue light provides stronger fluorescent signals and is safer for both samples and users.
- 3. Recommended DNA load is 10–200 ng DNA per lane, or 2–5  $\mu$ L PCR product. For large DNA load or maximum sensitivity, post-staining is preferred.
- While GelViewer has passed multiple safety assessments at MS-BIO, please follow all relevant laboratory safety practices and wear appropriate personal protective equipment (PPE).
- 5. For disposal, dilute GelViewer to lower than  $1 \times$ , and consult your institution's biosafety or environmental officer for local disposal procedures.

#### **Post-Staining Protocol**

- 1. Run electrophoresis according to your standard protocol.
- 2. Dilute GelViewer to a  $3 \times \text{staining solution using electrophores}$  buffer
- 3. Place the gel in a staining tray or suitable container and fully cover with the GelViewer 3  $\times$  staining solution.
- 4. Stain at room temperature for 10 to 30 min, with gentle shaking.
- (Optional) Destain the gel with deionized water to reduce background.
- 6. Image the gel using a UV illuminator or blue-light imager.

#### In-Gel Staining Protocol

- Prepare molten agarose gel solution according to your standard procedure.
- 2. Allow it to cool down to approximately 60  $^{\circ}\text{C}$  and add 10,000  $\times$  GelViewer at a 1:10,000 dilution.
- 3. Mix thoroughly and cast the gel.
- 4. Load samples and run electrophoresis.
- 5. Image the gel using a UV illuminator or blue-light imager.

# Staining Results

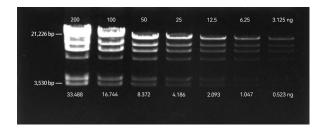


Figure 2: Post-staining of a 1 % agarose gel with GelViewer. Two-fold serial dilutions of  $\lambda$ -DNA/Hind III digest were loaded in amounts of 200, 100, 50, 25, 12.5, 6.25 and 3.125 ng from left to right.



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## **Related Products**

Cat. No.	Product	
FLD0601	Thiazole Green I ,10,000 $ imes$ in DMSO	
FLD0602	Thiazole Green II ,10,000 $ imes$ in DMSO	
FLD0701	JellyGreen, 10,000 $ imes$ in DMSO	
FLD0702	JellyRed, 10,000 $ imes$ in water	
FLD0703	GelViewer, 10,000 $ imes$ in water	

For Research Use Only. This product is intended for laboratory research purposes only and is not intended for use in diagnostic procedures, therapeutic applications, or in humans or animals.