

# Gel GreenSafe Stain (10000X in water)

Cat-No: S440; 0,5 ml

## **Description:**

Gel GreenSafe Stain is a highly sensitive, eco friendly safe fluorescent nucleic acid stain for detection of DNA and RNA in agarose and polyacrylamide gels.

Gel GreenSafe Stain emits green fluorescence when it bound to dsDNA, ssDNA, and RNA. It is an uncompromising alternative to ethidium bromide. DNA visualization after staining with Gel GreenSafe Stain can be done with standard UV transilluminators or blue LED transillumination.

For staining, Gel GreenSafe Stain can directly be added to the gel. Alternatively, staining is possible after electrophoresis.

The dye can be efficiently removed from DNA by gel extraction or ethanol precipitation. Therefore, it does not interfere with subsequent DNA manipulations such as restriction digestion, PCR, sequencing and cloning.

Gel GreenSafe Stain is a 10000X highly concentrated solution in H<sub>2</sub>O. It can be diluted 10000X for use in pre-staining gels or 5000X for use in post-staining gels by following the procedures outlined in the manual.

### Protocol:

### A. Pre stain:

- 1. Prepare agarose gel solution using your standard protocol.
- 2. Let the gel solution cool down and add the Gel GreenSafe Stain, 10000X in  $H_2O$  stock into the agarose gel solution at 1:10000 (for example, add 5  $\mu$ l of dye to 50 ml of agarose solution) and mix thoroughly.
- 3. Cast the gel and allow it to solidify.
- 4. Load samples and perform electrophoresis using your standard protocol.
- 5. Detect the bands in the stained gel with a standard **300 nm UV Transilluminator** or blue LED Transilluminator. **Note:** The pre-stain protocol is not recommended for polyacrylamide gels. For acrylamide gels please use the post staining protocol.

### B. Post stain:

- 1. Run gels as usual according to your standard protocol.
- 2. Dilute the Gel GreenSafe Stain, 10000X stock reagent 5000 fold to make a 2X staining solution in TBE or TAE buffer.
- 3. Carefully place the gel in a suitable polypropylene container. Gently add a sufficient amount of the 2X staining solution to submerge the gel.
- 4. Agitate the gel gently at room temperature for 30 min.
- 5. Image the stained gel with a standard UV Transilluminator or blue LED Transilluminator.

Note: The optimal staining time and amount of staining may depend on the texture of the gel.

Shipment: Room temperature

Storage: Room temperature or +4 °C, protect from light

**Disposal**: Gel GreenSafe Stain is not cassified as hazardous waste. It can be disposed as regular laboratory trash in accordance to the local regulations.

## Ordering information:

Catno	Description	Amount
S440	Gel GreenSafe Stain (10000X in water)	0,5 ml

. a good decision.



# Gel GreenSafe Stain (10000X in water)

Cat-No: S440; 0,5 ml

## **Description:**

Gel GreenSafe Stain is a highly sensitive, eco friendly safe fluorescent nucleic acid stain for detection of DNA and RNA in agarose and polyacrylamide gels.

Gel GreenSafe Stain emits green fluorescence when it bound to dsDNA, ssDNA, and RNA. It is an uncompromising alternative to ethidium bromide. DNA visualization after staining with Gel GreenSafe Stain can be done with standard UV transilluminators or blue LED transillumination.

For staining, Gel GreenSafe Stain can directly be added to the gel. Alternatively, staining is possible after electrophoresis.

The dye can be efficiently removed from DNA by gel extraction or ethanol precipitation. Therefore, it does not interfere with subsequent DNA manipulations such as restriction digestion, PCR, sequencing and cloning.

Gel GreenSafe Stain is a 10000X highly concentrated solution in H<sub>2</sub>O. It can be diluted 10000X for use in pre-staining gels or 5000X for use in post-staining gels by following the procedures outlined in the manual.

### Protocol:

### A. Pre stain:

- 1. Prepare agarose gel solution using your standard protocol.
- 2. Let the gel solution cool down and add the Gel GreenSafe Stain, 10000X in  $H_2O$  stock into the agarose gel solution at 1:10000 (for example, add 5  $\mu$ l of dye to 50 ml of agarose solution) and mix thoroughly.
- 3. Cast the gel and allow it to solidify.
- 4. Load samples and perform electrophoresis using your standard protocol.
- 5. Detect the bands in the stained gel with a standard **300 nm UV Transilluminator** or blue LED Transilluminator. **Note:** The pre-stain protocol is not recommended for polyacrylamide gels. For acrylamide gels please use the post staining protocol.

### B. Post stain:

- 1. Run gels as usual according to your standard protocol.
- 2. Dilute the Gel GreenSafe Stain, 10000X stock reagent 5000 fold to make a 2X staining solution in TBE or TAE buffer.
- 3. Carefully place the gel in a suitable polypropylene container. Gently add a sufficient amount of the 2X staining solution to submerge the gel.
- 4. Agitate the gel gently at room temperature for 30 min.
- 5. Image the stained gel with a standard UV Transilluminator or blue LED Transilluminator.

Note: The optimal staining time and amount of staining may depend on the texture of the gel.

Shipment: Room temperature

Storage: Room temperature or +4 °C, protect from light

**Disposal**: Gel GreenSafe Stain is not cassified as hazardous waste. It can be disposed as regular laboratory trash in accordance to the local regulations.

## Ordering information:

Catno	Description	Amount
S440	Gel GreenSafe Stain (10000X in water)	0,5 ml

. a good decision.