

## SafeGreen DNA staining solution 10,000X

Product No.: 3508Package: 1ml; 1mlx2Storage: Store at room temperature for daily use.Store at 4°C for long term storage. Dissolve completely before usage.

## **Technical Specifications**

Excitation: 470 nm (UV as well) Emission: 525 nm (green)

Light Source: Blue light

Sensitivity Limit: 0.5 ng DNA per band

Safety: Non-carcinogenic by the Ames test.

May cause skin and eye irritation. Always wear gloves when working with the product.

## Description

*SafeGreen* DNA staining solution 10,000X replace toxic Ethidium Bromide (EtBr), a potent mutagen, for the visualization of double-stranded DNA in agarose. It is non-carcinogenic and easy to use.

## Protocol

- 1. Prepare a 100 ml of agarose gel solution in a suitable flask and mix it thoroughly.
- 2. Place the flask in the microwave, heat in until the solution is completely clear and on small floating particles are visible (about 2~3 minutes).

3. Add 10  $\mu$ l of *SafeGreen* DNA staining solution 10,000X to the agarose solution. Swirl the flask gently to mix the solution and avoid forming bubbles.

- 4. Let the solution cool down to  $60 70^{\circ}$ C and cast the gel.
- 5. Allow the agarose gel to cool until solidified. Load samples on the gel and perform electrophoresis.
- 6. View the results under blue LED light or UV.

%If SafeGreen DNA staining solution 10,000X was not added prior to gel casting, stain by immersing the

gel in the buffer containing *SafeGreen* :

1. Prepare enough buffer (TAE or TBE) containing *SafeGreen*, dilute *SafeGreen* by 1: 10,000 (1µl : 10ml).

2. Cover the gel and soak the gel completely with gentle agitation until the bands are fully detected (about 20 min)