



a s a g e n e



شرکت زیست فناوری آساژن

Green DNA Safe Stain

Cat. No: safe1313

Quantity: 1ml

Storage: Store at -20°C
for 18 months, protected from light
For Research Use Only



Description:



Green DNA Safe Stain is a highly sensitive fluorescent stain for detecting nucleic acids in agarose and polyacrylamide gels. The dye exhibits a preferential affinity for DNA and its fluorescent signal is greatly enhanced when bound to DNA. The detection limit using Green DNA Safe Stain is as low as 60pg per band of ds DNA using 300 nm transillumination. With 254 nm epi-illumination, as little as 20 pg of ds DNA can be detected. This is approximately 25 to 100 times more sensitive than ethidium bromide staining. The stain can also detect single stranded DNA and RNA, although the sensitivity is lower. The detection limit for oligonu

cleotides stained with this stain is 1 -2 ng with 300 nm transillumination

The stain is maximally excited at 494 nm and has secondary excitation peaks at 284 nm and 382 nm. The emission of DNA stained with this stain is centered at 521 nm. The fluorescent characteristics of Green DNA Safe Stain make it compatible with UV trans- and epi-illuminators, blue-light transilluminators, and argon ion lasers. Nucleic acids stained with Green DNA Safe Stain can also be detected by a hand-held ultraviolet lamp with some loss in sensitivity

Protocol:



1. **Remove** the stock solution of Green DNA Safe Stain from the freezer and allow the solution to thaw at room temperature.
2. **Spin** the solution in a microcentrifuge to collect the dye at the bottom of the tube.
3. **Prepare** 50 ml of agarose gel solution (concentration from 0.8-3.0%) in a flask and mix it thoroughly. Place the flask in the microwave, heat it about 2~3 minutes until the solution is completely clear and no small floating particles are visible.
4. **Add** 2.5µl of Green DNA Safe Stain to the gel solution and mix it gently.

5. **Cool** the gel to 50-60°C and cast the gel, into the gel tray.
6. **Load** samples on the gel and perform electrophoresis.
7. **Detect** the bands under UV illumination.

Caution:

Green DNA Safe Stain may irritate skin and eyes. It is recommended to wear suitable protective clothing, gloves and safety glasses. Avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.