

Safe-Red Gel Nucleic Acid Stain

Catalog	Unit
TBS6113	1.0 ml

Description

Safe-Red Gel is a new and safe class of nucleic acid stain for the visualization of double-stranded DNA, single-stranded DNA, and RNA in agarose gels. The dyes are developed to replace Ethidium Bromide (EtBr, a potent mutagen), commonly used in gel electrophoresis for visualization of nucleic acids in agarose gels. Safe-Red Gel is non-carcinogenic by the Ames-test. The results are negative in both the mouse marrow chromophilous erythrocyte micronucleus and mouse spermary spermatocyte chromosomal aberration tests. Safe-Red Gel is used the same way as EtBr in agarose gel electrophoresis. This stain emits red fluorescence and has an excitation of 300 nm and emission of 600 nm.

Component

Product	Concentration	Format	Quantity
Safe-Red Gel	10,000X	Pre-cast or Post-stain	1.0 ml

Store at 18-25°C.

Protocol

Pre-casting gels

1. Prepare agarose gel solution and cool to 60-70°C. Pre-cast or Post-stain 1.0 ml
2. Add 10 µl Safe-Red Gel per 100 ml molten agarose, mix gently to avoid bubbles, and cast the gel.
3. Load samples and run gels according to your standard protocol.
4. View the results under UV or blue LED light.

Post-staining gels

1. Prepare agarose gel solution and cool to 60-70°C. Run unstained agarose gel according to your standard protocol.
2. Submerge the gel in post-staining solution of 30 µl Safe-Red Gel per 100 ml 1X TAE or TBE buffer.
3. Agitate the gel gently at room temperature, protected from light for 30 minutes.
4. View the results under UV or blue LED light.
5. Store leftover staining solution in a sealed container at room temperature, protected from light for up to 1 week.

For research use only