

GR Safe Nucleic Acid Gel Stain, 10,000X in Water



<http://www.labsupplymall.com>

Catalog #: **IV-1001** Store at 4 °C or Room Temperature

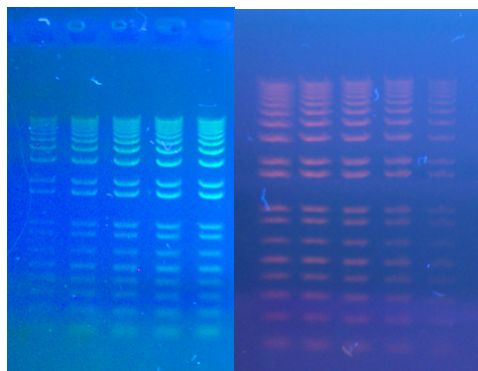
Introduction

GR Safe is a nucleic acid stain for detecting nucleic acids in agarose gel. It can be used for replacing mutagenic ethidium bromide (EB).

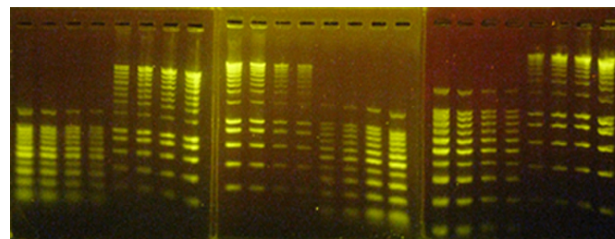
Compared to EB which is a very strong mutagen, GR Safe caused fewer mutations than EB in the Ames test.

Features:

- † Available at 10,000X in H₂O for better safety -
-No more toxic and flammable organic solvent
- † Stable. GR Safe can be stored at room temperature or 4 °C --No more freeze-and-thaw cycle!
- † Compatible with UV or blue light transilluminator and common gel documentation systems.
- † Will not affect downstream experiments: compatible with all gel purification kits tested, will not inhibit ligation reaction etc
- † Compatible with Sodium Borate Electrophoresis Buffer: Run gel 2-3 times faster at higher voltage, resolve shaper bands in minutes, and less heat generation.
- † Cut out DNA bands for subcloning under safer blue light: No mutations caused by EB and UV light.



GR Safe **EtBr**
Fig. 1, Comparison of GR Safe with EtBr.



TAE **TBE** **Sodium Borate**
Fig. 2, GR Safe is compatible with three common agarose electrophoresis buffers

Storage: Store at room temperature.

Disposal:

Gel: Biosafety trash bag.

TAE, TBE or Sodium Borate Buffers: sink or consult a chemical safety officer at your institution.

Protocol:

1. Prepare 40 ml of agarose gel solution (concentration from 0.8~2.0%) with TAE, TBE or Borate Buffer in a 250 ml flask and mix it thoroughly. Place the flask in the microware, heat on high until the solution is completely clear and no small floating particles are visible (about 2~3 minutes).
2. After the gel solution cool to about 55 °C, add 1 to 4 µl of GR Safe to the solution. Swirl the flask gently to mix the solution and avoid forming bubbles.
3. Pour the gel solution into a gel tray until the comb teeth are immersed about 1/4~1/2 into the gel solution.
4. After the agarose gel has solidified you can perform electrophoresis using either 1X TAE or 1X Borate Buffer (Available from <http://www.labsupplymall.com>).
5. Detect the bands using UV or blue light transilluminator.

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FAQ

1, Should I wear gloves when using this dye?

You should exercise common safe laboratory practices when using this reagent.

2, What blue light transilluminator should I used with GRGreen dye?

DarkReader.

3, What filter should I use for blue light transilluminator?

Filter from Clare Chemical.

You should exercise common safe laboratory practices when using this reagent.