



GelGreenSafe DNA stain
(0.5-1-2-10 mL)

Zellbio GmbH (Germany)

CAT No. ZXB-06-160

www.zellx-biochem.com

!!! Caution: This product is for Research Use Only. Not for *in-vitro* Diagnostics !!!

Please read this insert completely prior to using the product.

Background

ZellX[®] GelGreenSafe DNA stain is a fluorescent nucleic acid stain and a safe and convenient alternative to replace highly toxic Ethidium Bromide (EtBr) for staining double-stranded DNA, single-stranded DNA, and RNA in agarose and polyacrylamide gel electrophoresis.

GelGreenSafe DNA stain has three fluorescence excitation peaks, two at UV range at 270 nm and 295 nm and one strong excitation peak in the blue light range at 485-490 nm; and therefore is compatible with a large variety of gel documentation systems including either a 270/295 nm UV trans illuminator or a gel reader equipped with visible light excitation (such as blue LED light box, 488 nm laser-based gel scanner, or Dark Reader[®]).

It is a highly sensitive DNA gel stain and is far more sensitive than SYBR Safe for analyzing even small fragments due to its reduced nonspecific background fluorescence. Unlike SYBR[®] dyes, which are known to be unstable, GelGreenSafe is highly stable, both hydrolytically and thermally.

Features

- **Easy to Use:** you can directly replace EtBr without changing your existing imaging system.
- **Safe:** Non-carcinogenic by the AMES test.
- **Sensitive:** Increase your sensitivity by reducing nonspecific background fluorescence.

Kit Component

<i>Cat. No</i>	<i>Component</i>	<i>Quantity</i>
ZXB-06-160-500	GelGreenSafe DNA stain	500 µL
ZXB-06-160-1	GelGreenSafe DNA stain	1 mL
ZXB-06-160-2	GelGreenSafe DNA stain	2 mL
ZXB-06-160-10	GelGreenSafe DNA stain	10 mL

Storage instruction

GelGreenSafe DNA stain should be stored at 2-8° C and protected from light until the expiration date of the kit. **Do not freeze the GelGreenSafe.**

Assay Procedure

ZellX[®] GelGreenSafe DNA stain is appropriate for either post-electrophoresis gel staining or precast gel staining.

post-electrophoresis gel staining

1. Run samples on gel without Gel stain.
2. Make a 3X dilution of GelGreenSafe in water (For <0.5 cm thick agarose gels, 10-15 µL of stain should be used per 50 mL of water).
3. Incubate the gel in staining solution for 10 - 30 minutes. Staining time varies and depends on thickness of the gel and percentage of the agarose.
4. The post-staining solution may be used 2-3 times. For reusing staining solution, store it at room temperature in the dark.

precast gel staining

1. Prepare 100 ml of agarose gel solution (concentration from 0.8 - 3.0 %) and heat until the solution is completely clear and no small floating particles are visible.
2. Add 10 µl of the GelGreenSafe to the gel solution and mix it gently. (For 50 mL agarose add 5 µl of the GelGreenSafe)
3. Cool the gel to 50 – 60 °C and cast the gel into the gel tray.
4. When the gel is solid, load the samples and perform electrophoresis.
5. Visualize the gel under UV illuminator. Blue LED light can also be used for Gel visualization alternatively. Yellow or green gelatin or cellophane filters should be used for photography.