Product datasheet

RealSafe Nucleic Acid Gel Stain

Catalog number : IRRG8010

Application : DNA stain

Package size: 1 mL

Content

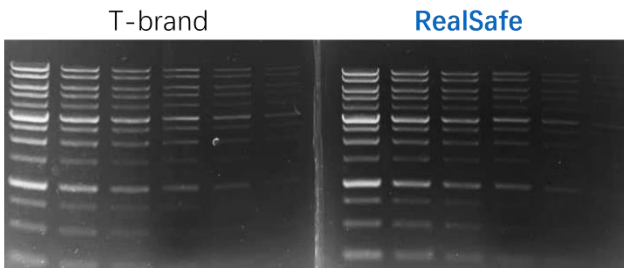
RealSafe Nucleic Acid Gel Stain	Package
10,000X in DMSO	1 mL

Shipping and Storage Information

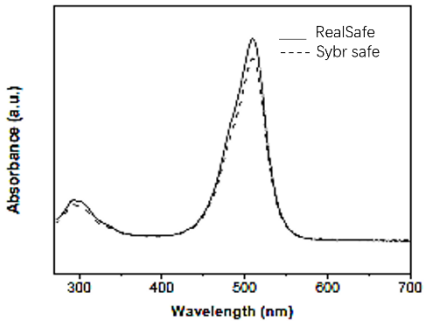
Product Name	shipping	Storage
IRRG8010	Shipping under -20℃	1. 6 months under 4 °Cwith protection from light. 2. 1 year under <-20℃with protection from light.

Features

1. One Used for detecting DNA and RNA.
2. Alternative to the ethidium bromide staining.
3. As sensitibe as EtBr or more sensitive than that.
4. Non-toxic, non-mutagenic and non-carcinogenic.
5. No hazard waste.



DNA fragments were electrophoresed through an agarose gel, then stained with **RealSafe** and SYBR Safe under the same conditions.



The compared emission spectra of commercial Sybr safe and **RealSafe**. Both were diluted with 1000X volume of DMSO.

Description

RealSafe Nucleic Acid Gel Stain is a new and safe nucleic acid stain, an alternative to the traditional ethidium bromide(EtBr) stain for detecting nucleic acid in agarose gels.
It emits green fluorescence when bound to DNA or RNA. This new stain has two fluorescence excitation maxima when bound to nucleic acid, one centered at 309 nm and another at 419 nm. In addition, it has one visible excitation at 514 nm. The fluorescence emission of **RealSafe** bound to DNA is centered at 537 nm.
The staining protocol for RealSafe Nucleic Acid Gel Staining Solution (10,000x) is similar to that for EtBr. Compared to EtBr, known as a strong mutagen. In addition, RealSafe Nucleic Acid Gel Staining Solution (10,000x) has a negative result in mouse marrow chromophilous erythrocyte micronucleus test and mouse spermatocyte chromosomal aberration test.

Protocol	1. Staining nucleic acids after electrophoresis: A. Working solution preparation: DiluteGEL-SAFE 10,000Xsolutionin TAE or TBE buffer prior to use. B. Place the gel in a plastic container, do not use a glass container, because the dye in the staining solution may adsorb to the walls of the container, resulting in poor gel staining. Add sufficient diluted GEL-SAFEsolutionto cover the gel, and ensure that the gel is fully immersed during staining. C. Incubate for 30 minutes. Cover the gel and the staining solution with aluminum foil or place them in the dark to protect from light. Continuously agitate the gel on an orbital shaker at 50 rpm. No destaining is required. 2. Precasting GEL-SAFE stain in agarose gels: A. 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. B. Add 10 µL of GEL-SAFE DNA Stain to the gel solution and mix it gently. C. Cool the gel to 50-60°Cand cast the gel, into the gel tray. D. When the gel is solid, load the samples and perform electrophoresis. E. No post-staining or destaining is needed. Note: The mobility of nucleic acid fragments in the gel may be somewhat slower when run in these gels compared to their mobility in the gel without stain. 3. Viewing and photographing the gel: A. You can view stained gels using a standard 280~300nmUV illuminator.
Precautions	1. GEL-SAFEis dissolved in DMSO, which may freezeat low temperatures; therefore, the product must be completely thawed and mixed before using. 2. Repeated freeze-thawing has minimal impact on productproperties, however, but excessive repeated freezing and thawing (more than 10 times) is still not recommended.

IReal Biotechnology Co., Ltd.

iReal Antibodies

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