SinaClon BioScience
شرکت سیناکلون

DNA Safe Stain

REF EP5082 Quantity: 1ml

Room Temperature

RUO

2°C 8°C

*Spin down before use

Components

Contents	Quantity/ Volume
DNA Safe Stain	1ml

Description

DNA Safe Stain is a new nucleic acid stain which can be used as a safer alternative to the traditional ethidium bromide stain for detecting nucleic acid in agarose gels. It is as sensitive as Ethidium bromide and can be used exactly the same way in agarose gel electrophoresis.

DNA Safe Stain emits green fluorescence when bound to DNA or RNA. It has two secondary fluorescence excitation peaks (~300nm; ~400nm) and one strong excitation peak centered around 500nm. The fluorescence emission is centered at ~540 nm. Thus, DNA Safe Stain is compatible with a wide variety of gel reading instruments.

DNA Safe Stain can be used for precast agarose gels and when better sensitivity is needed – poststaining is recommended.

Applications

Non-carcinogenic alternative to Ethidium bromide

Note

1. Warm DNA Safe Stain to room temperature before use.
2. 1 ml of DNA Safe Stain is sufficient for 50-65 L of agarose gel. The thickness of gel should **< 0.5cm**. Repeated melting of gels containing DNA Safe Stain may result in low sensitivity. DNA Safe Stain is non-carcinogenic but may irritate skin and eyes. Please wear gloves while handing.

Safety

DNA Safe Stain is non-carcinogenic and according to the Ames test it causes significantly fewer mutations than Ethidium bromide.

Protocol

A. Precasting

Prepare 100ml 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.

Add **1-1.5µl** of DNA Safe Stain to the gel solution and mix it gently.

Cool the gel to 50-60°C and cast the gel, into the gel tray. When the gel is solid, load the samples and perform electrophoresis. Detect the bands under UV illuminator.

B. Poststaining:

The DNA Safe Stain poststaining solution may be used 2-3 times. Staining solution to be reused should be preferably stored at room temperature in the dark.

For <0.5 cm thick agarose gel, 5-15 µl of the stain should be used per 100 ml of buffer.

Optimal staining time (5 - 60 minutes) and the amount of the stain may depend on the thickness of the gel and the percentage of agarose.

Signs

Signs	Definitions
	Temperature range on product use
	For Research Use Only
	Product shipping conditions
	Name and address of the manufacturer of the product
	Product technical code
	protected from light

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