



NBS Biologicals

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SafeView Nucleic Acid Stain

Improved Formulation

Handbook (inc. protocol)

Compatible with:

- In Gel Staining
- Post Staining

The Safer Alternative to Ethidium Bromide!

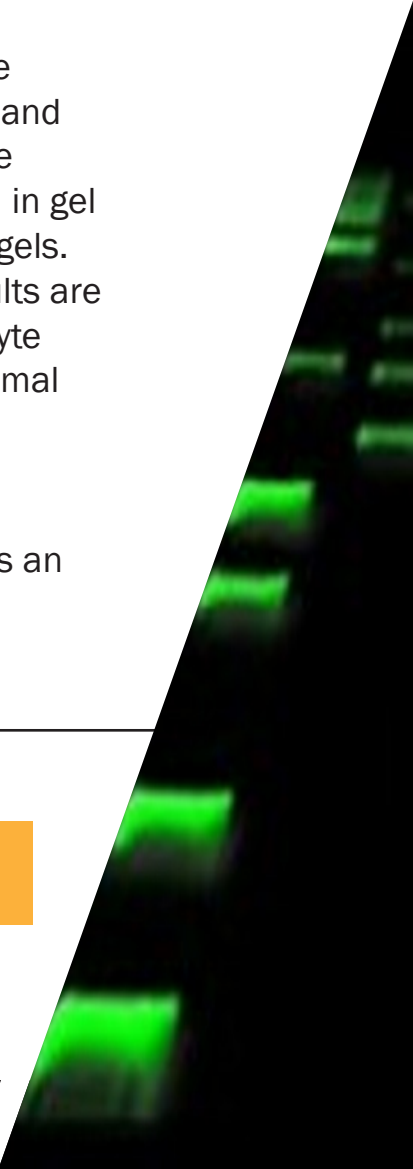
SafeView is a new and safe class of nucleic acid stain for the visualisation of double-stranded DNA, single-stranded DNA, and RNA in agarose gels. This dye has been developed to replace Ethidium Bromide (EtBr, a potent mutagen), commonly used in gel electrophoresis for visualisation of nucleic acids in agarose gels. SafeView is non-carcinogenic by the Ames-test, and the results are negative in both the mouse marrow chromophilous erythrocyte micronucleus and mouse spermary spermatocyte chromosomal aberration tests.

SafeView is used the same way as EtBr in agarose gel electrophoresis. This stain emits green fluorescence and has an excitation of 514 nm and emission of 533 nm.

Cat. No
NBS-SV1

Quantity
1ml

Store at 18-25°C



Protocol

Pre-casting gels

1. Prepare agarose gel solution and cool to cool to 60-70°C
2. Add 10µl SafeView per 100ml 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 blue LED light (optimal) or UV light (weaker)
5. Store unused gels in a sealed container away from light for up to 1 week

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 30µl SafeView per 100ml 1X TAE or 1X TBE buffer.
3. Agitate the gel gently at room temperature, protected from light for 30 minutes
4. View the results under blue LED light (optimal) or UV light (weaker)
5. Store leftover staining solution in a sealed container at room temperature, protected from light for up to 1 week

SafeView is non-carcinogenic but may cause skin and eye irritations. Always wear gloves when working with the product.

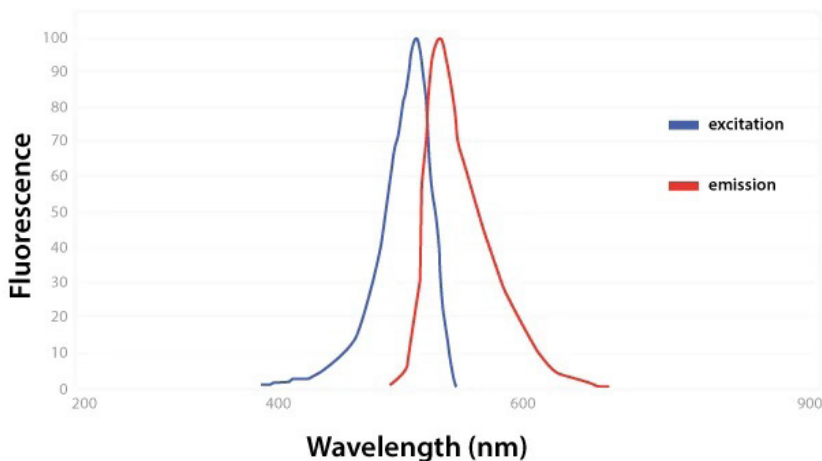
This product is distributed for laboratory research only.

CAUTION: Not for diagnostic use. The safety and efficiency of this product in diagnostic or other clinical uses has not been established.

STORE AT 18-25°C

Additional Information

Absorption and Emission Spectrum for SafeView



Frequently Asked Questions

Q; [Can SafeView be a replacement for ethidium bromide? Can I do gel extraction/cloning with it?](#)

A; Yes, SafeView can be used as a complete replacement for your ethidium bromide workflow. SafeView can be used during gel extraction - our testing demonstrated that gel extraction of DNA fragments using a SafeView gel resulted in no decrease in ligation efficiency vs ethidium bromide. We have not observed any decrease in cloning efficiency using SafeView

Q; [Can SafeView differentiate double stranded vs single stranded nucleic acids?](#)

A; No, SafeView will bind to both double-stranded and single-stranded nucleic acids, albeit with lesser efficiency for single-stranded nucleic acid species

Q; [Do I need a special filter for photography of DNA gels stained with SafeView?](#)

A; SafeView is compatible with UV or Blue Light imagers, it is however more optimally visualised under Blue Light, making SafeView safer for the user and their samples. Any imaging system with UV, Blue light and/or LED should work

Q; [How Sensitive is SafeView?](#)

A; SafeView can detect as little as 1-2 ng of DNA per gel band

Q; [Why is the EtBr signal stronger in the pictures when I compare SafeView with EtBr?](#)

A; Most gel imaging systems have been optimised for EtBr so this is a likely reason why the EtBr signal may be stronger in the pictures

Q; [How long does SafeView Classic stain last in a gel?](#)

A; Our testing has shown that SafeView stained gels (>10ng DNA loaded per lane) can still be effectively visualised up to 1 week later with only a slight decrease in brightness. Gels should be stored properly to maintain a good signal, sealed in a plastic bag with wet paper towel loosely wrapped around the gel, away from light. Similarly, a pre-cast unused SafeView gel can be stored and used up to 1 week after being prepared provided they are stored in ideal conditions (sealed in plastic bag, away from light). If stored longer than a week, there will be decreased resolution

Q; [What is the shelf life of SafeView?](#)

A; SafeView can be kept for 2 years at 18-25°C

Q; [Can SafeView products be stored at -20°C?](#)

A; No, please only store SafeView at 18-25 °C

Q; [Can I use SafeView products in polyacrylamide gels?](#)

A; SafeView is designed for use with agarose gels, and is not optimised for polyacrylamide gels

Q; [Will staining appear the same when using UV light and LED \(same colors\)?](#)

A; UV and LED will give the same colors

Q; [How should I dispose of SafeView?](#)

A; Dispose of SafeView as you would any other non-carcinogenic fluorescent dye (eg. Acridine orange; Propidium iodide). All gels and contaminated “non-sharp” lab debris (e.g., gloves, pads, towels, tubes, etc.) that are processed using this dye can be discarded in normal waste. Spent running buffer solutions and destaining solutions that contain the dye should be disposed in accordance with local regulations



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You may also be interested in some of our other Electrophoresis products....

Agarose LE; All-purpose Agarose for molecular biology

SafeGreen; A safer alternative to Ethidium Bromide, but in the form of a 6X loading buffer