



NBS Biologicals

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SafeView Nucleic Acid Stain Handbook (inc. protocol)

The Safer Alternative to Ethidium Bromide!

SafeView is a safe nucleic acid stain for the detection of double-stranded DNA, single-stranded DNA and RNA in Agarose gels. This dye replaces Ethidium Bromide (toxic, potential mutagen) for visualisation of DNA or RNA in Agarose gel. SafeView is non-carcinogenic and causes significantly fewer mutations in the Ames test and tests negative in both the mouse marrow chromophilous erythrocyte micronucleus test and mouse spermary spermatocyte chromosomal aberration test. SafeView is as sensitive as Ethidium Bromide and it is used in the same way as Ethidium Bromide in Agarose gel electrophoresis.

SafeView emits green fluorescence when bound to dsDNA, ssDNA, and RNA. This stain has excitation wavelengths of 302nm (UV) and 490nm (blue light), and an emission wavelength of 520 nm.

Cat. No	Quantity
NBS-SV1	1 x 1ml
NBS-SV5	5 x 1ml

Store at 4°C

Protocol

In Gel Staining

1. Prepare a 100ml agarose or polyacrylamide solution
2. Add 5µl SafeView to 100ml of gel solution
3. Mix gently; the solution should have no air bubbles
4. For agarose gel, let the solution cool down to 60 - 70°C and cast the gel
For polyacrylamide gel, add APS and TEMED and cast the gel according to regular polyacrylamide gel casting protocol.
5. Run gel electrophoresis with 5 µl SafeView per 100ml of running buffer
6. View results under UV or blue LED light

Please note: We no longer recommend using standard SafeView for post-staining. If you would like to post stain please use SafeView Plus.

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 REFRIGERATED AT 4°C

SafeView can be stored at room temperature for up to 1 week if necessary, we would recommend aliquoting out a suitable quantity from the stock vial.

SafeView Compatibility

SafeView has been tested for use with the following applications:

- ✓ In gel staining
- ✓ Transformation
- ✓ Ligation
- ✓ Gel extraction
- ✓ Transfection

Prior to setting, SafeView/Agarose solution can be retained at 65 °C for same day use.

Frequently Asked Questions

Q; [Can SafeView be visualised under blue light?](#)

A; Yes, our latest formulation can be viewed under UV light or blue light.

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

A; SafeView can be used to detect as little as 0.1 – 0.3 ng of DNA per gel band.

Q; [Can SafeView be used to stain DNA/RNA in Acrylamide gels?](#)

A; Yes, the latest formulation of SafeView is compatible with polyacrylamide gel electrophoresis, please refer to the protocol.

Q; [What if the bands are too faint?](#)

A; Optimal band clarity is achieved by adding SafeView to both the gel and the running buffer (5µl to each), as per protocol. Previous formulations of SafeView recommended 10µl be added only to the gel, and while this protocol can still be used you may notice slightly fainter results.

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

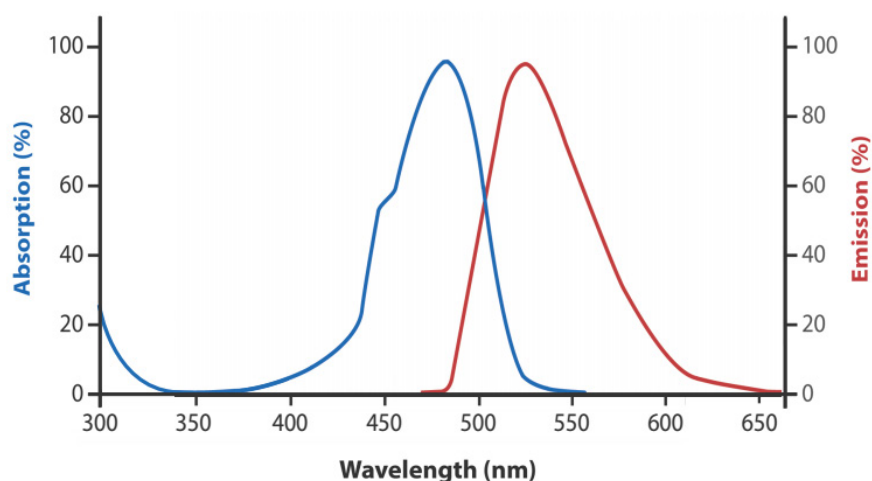
A; SafeView can be kept for 2 years at 4°C.

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

A; SafeView contains no substances known to be hazardous to the environment or non-degradable in waste water treatment plants. Dispose of in accordance with local regulations.

Additional Information

Absorption and Emission Spectrum for SafeView





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

Agarose - Low EEO; All-purpose Agarose for molecular biology.

SafeGreen; Uses the same technology as SafeView, a safe alternative to Ethidium Bromide but in the form of a 6X loading buffer.

DNA Ladder Plus; Extended range ladders in 50bp, 100bp and 1kb sizes.