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Product Information

RedView™ DNA Gel Stain, 10,000X in DMSO

Catalog Number	Packaging Size
N102	500 μL

Storage upon receipt:
- 2-25°C
- Protect from light

Ex/Em: 300/600 nm, bound to nucleic acid

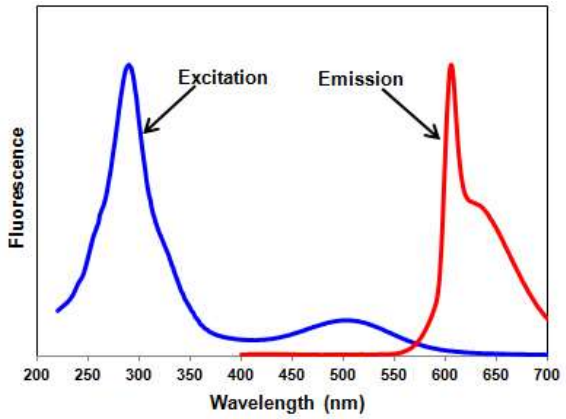
Product Description

RedView is a sensitive, and stable fluorescent nucleic acid stain designed to replace the highly toxic ethidium bromide (EtBr) for detection of dsDNA, ssDNA or RNA in agarose and polyacrylamide gels. This single stain gives more sensitive detection of dsDNA, ssDNA and RNA than EtBr. Gels can be post-stained or alternatively the stain can be added to agarose gels during gel casting. **RedView** has similar excitation and emission spectra with EtBr, and is compatible with EtBr imaging system.

RedView Nucleic Acid Gel Stain, 10,000X is a concentrated **RedView** solution that can be diluted 10,000 times for use in precast gel staining or 5,000 times for use in post gel staining according to the procedures described below. One vial of 10,000X solution can be used to prepare at least 100 precast minigels or post-stain at least 100 minigels.

Gel staining with **RedView** is compatible with downstream applications such as gel extraction and cloning. **RedView** is efficiently removed from DNA by phenol/chloroform extraction and ethanol precipitation.

Spectral Characteristics



Excitation (blue) and emission spectra (red) of **RedView** bound to dsDNA in TBE buffer

Staining Protocols

1. Post-staining Protocol

1.1 Run gels as usual according to your standard protocol.

1.2 Dilute the **RedView** 10,000X stock reagent 5,000 fold to make a 2X staining solution in TE, TBE, or TAE buffer.

1.3 Carefully place the gel in a suitable polypropylene container. Gently add a sufficient amount of the 2X staining solution to submerge the gel.

1.4 Agitate the gel gently at room temperature for 30 min.

1.5 Wash the gel with DI water to remove excess dye. Image the stained gel with a standard 300 nm transilluminator, or a laser-based gel scanner using an EtBr filter.

2. Pre-cast Protocol

2.1 Prepare molten agarose gel solution using your standard protocol.

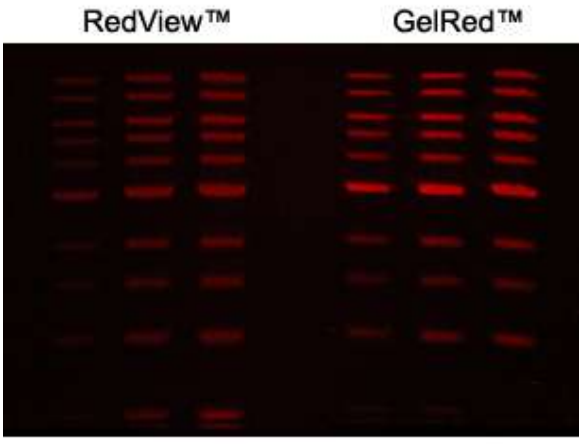
2.2 Dilute the **RedView** 10,000X stock reagent into the molten agarose gel solution at 1:10,000 and mix thoroughly.

2.3 Cast the gel and allow it to solidify.

2.4 Load samples and run the gels using your standard protocol.

2.5 Image the stained gel with a standard 300 nm transilluminator, or a laser-based gel scanner using an EtBr filter.

Note: The pre-cast protocol is not recommended for polyacrylamide gels. Use the post staining protocol for acrylamide gels.



RedView™ and GelRed™ in post gel staining

Related Products

Cat. No	Product Name	Unit Size
N100	GreenView™ DNAGel Stain, 10,000X in H_2O	500 μL
N101	GreenView™ Plus DNA Gel Stain, 10,000X in DMSO	500 μL
N103	GreenView™ Ultra DNA Gel Stain, 10,000X in DMSO	500 μL

Troubleshooting

Problem	Suggestion
Smeared DNA bands in precast gel	1. Reduce the amount of DNA loading. Smeared bands can be caused by overloading. 2. Perform post-staining instead of pre-casting. 3. Prepare a lower percentage agarose gel for better resolution of large fragments. 4. Change the running buffer. TBE buffer has a higher buffering capacity than TAE.
Discrepant DNA migration in precast gel	1. Reduce the amount of DNA loading. 2. Reduce the amount of dye used, i.e. use 0.5X in precast gels. 3. Perform post-staining instead of pre-casting.
Weak fluorescence signal	1. The dye may be precipitated out of solution. Vortex to redissolve. 2. Increase the amount of dye used, i.e. use 2X in precast gels..

Frequently Asked Questions

Question	Answer
Can RedView be used to stain ssDNA or RNA?	Yes.
Is RedView compatible with downstream applications such as cloning, ligation and sequencing?	Yes. We recommend Qiagen or Zymo gel extraction kits or phenol-chloroform extraction to remove the dye from DNA.
Is RedView compatible with Southern or Northern blotting?	RedView has not been validated in blotting applications.
Can I reuse a RedView precast gel after electrophoresis?	We do not recommend reusing RedView precast gels as signal decreases with subsequent electrophoresis.
What is the lower detection limit of RedView?	Some users have reported being able to detect less than 0.5 ng DNA. However, the limit of detection will depend on instrument capability and exposure settings.
Does RedView need to be used in the dark?	You can use the dye in room light, however we recommend storing the dye in the dark.