

VisualaNA X DNA Stain

Cat No: DY-M-004-500

Size: 500ul

Store at 4°C (protect from light)

MOLEQULE-ON[®]

Description

VisualaNA X is a new member to VisualaNA family. It 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 and potential mutagen) for visualization of DNA and RNA in agarose gel. VisualaNA X DNA stain emits green fluorescence when bound to DNA or RNA. It has two fluorescent excitation maxima of ~250 and ~482 nm, and an emission maximum of ~509 nm.

VisualaNA X was developed to work best with Blue and Blue/Green LED Illuminators and Gel Doc Systems. VisualaNA X is non-carcinogenic and according to the Ames test, it causes significantly fewer mutations than Ethidium bromide. Furthermore, it is impenetrable to latex gloves and cell membranes. The stain is also classified as non hazardous to aquatic life, under CCR Title 22 regulation. Thus, small amounts this stain can be safely released into the environment.

Features

- Sensitivity: 0.14 ng DNA or 1 ng total RNA
- Excellent for in-gel staining
- Perfect for Blue and Blue/Green LED
- Nearly no background signal

Protocol

In-Gel Staining

1. Prepare 50 ml of agarose gel solution (0.8 - 3.0%) and heat until the solution is completely clear and no floating particles are visible.
2. Add 2 - 4 µL of VisualaNA X to the gel solution and mix well until the stain is completely dissolved.
3. Cool the gel to 60 - 70°C and cast it. When the gel is solid, load the samples and perform electrophoresis.
4. After the electrophoresis, view and document your result, using a non-hazardous Blue or Blue/Green LED Illuminator.

Post-staining

1. Dilute VisualaNA X 1 to 10,000 in appropriate buffer.
2. Staining solution should be stored in a plastic container at RT in the dark and can be used for up to one week or more.
3. Incubate the gel in staining solution for 10 - 30 minutes. Staining time varies with the thickness of the gel and percentage of the agarose.

VisualaNA X Compatibility

VisualaNA X has been tested for use with the following applications:

In gel staining, transformation, post-staining Ligation, gel extraction and transfection.



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