# VisualaNA (A) Nucleic Acid Stain

Cat No: DY-M-002-500
Size: 500ul
Store at 15-25°C (protect from light)
For longer use, store at 4°C
(Ready to use)



## **Description**

VisualaNA A 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 A DNA stain emits green fluorescence when bound to DNA or RNA. It has two secondary fluorescence excitation peaks (~270nm; ~290nm) and one strong excitation peak centered around 490nm. The fluorescence emission is centered at ~530nm. Thus, VisualaNA A DNA stain is compatible with a wide variety of gel reading instruments. VisualaNA A can be used for precast agarose gels and when better sensitivity is needed – post-staining is recommended. VisualaNA A is non-carcinogenic and according to the Ames test, it causes significantly fewer mutations than Ethidium bromide.

#### **Features**

- ➤ Non carcinogenic
- > Non hazardous to the environment
- VisualaNA A is as sensitive as ethidium bromide

#### **Protocol**

## In Gel Staining

- 1. Prepare 100 ml 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.
- 2. Add 4-6  $\mu$ l of VisualaNA A to the gel solution and mix it gently. Cool the gel to 50 60°C and cast the gel into the gel casting tray.
- 3. When the gel is solid, load the samples and perform electrophoresis.
- 4. Detect the bands under UV illuminator.
- 5. Yellow or green gelatin or cellophane filters should be ready for photography.

### **Post Staining**

- 1. VisualaNA A post-staining solution may be used 2-3 times. Staining solution to be reused should be preferably stored at room temperature in the dark.
- 2. For <0.5 cm thick agarose gel, 10-25 µl of the stain should be used per 100ml of buffer.
- 3. Optimal staining time (5-60 minutes) and the amount of the stain may depend on the thickness of the gel and percentage of agarose.

## VisualaNA Compatibility

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

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

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



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