

# VisualaNA S DNA Stain

Cat No: **DY-M-004-1000**

Size: 1ml

Store at 4°C (protect from light)

(Ready to use)

**MOLEQULE-ON**<sup>®</sup>

## Description

VisualaNA S 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 S 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 S DNA stain is compatible with a wide variety of gel reading instruments. VisualaNA S is used with samples. It has DNA loading buffer therefore, mixing with the sample and loading on agarose gel will give required results. VisualaNA S is non-carcinogenic and according to the Ames test, it causes significantly fewer mutations than Ethidium bromide. Furthermore, VisualaNA S 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 VisualaNA S stain can be safely released into the environment.

## Features

- Non carcinogenic
- Non hazardous to the environment
- VisualaNA S is as sensitive as ethidium bromide

## Protocol

### In Gel Staining

VisualaNA S is provided in a sample loading buffer and should only be added to your samples.

1. Prepare the agarose solution.
2. Mix gentle without having any air bubbles.
3. Let the solution cool down to 60-70°C.
4. Cast the gel.
5. Mix samples and DNA markers with VisualaNA S stain at 1:10 (dye : samples) dilution rate.

Note: If you expect only 1 or few DNA bands in a lane do not use more than 0.5 µl of VisualaNA S sample, even if you use more than 5 µl sample volume. If you apply DNA ladders or samples with many bands use 1 µl of VisualaNA S.

6. After the electrophoresis, view and document your result, using traditional UV light or non-hazardous Blue or Blue/Green LED Illuminator for health and performance reasons.

## VisualaNA S Compatibility

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

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



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