

## Atlas ClearSight RNA Stain

Cat. No.	Pack Size
BH40601	0.4 ml
BHS0019	50 µl SAMPLE

### Storage & Shipping:

Store at +4°C, protected from light, shipping at room temperature.

**Spin down before use.**

### Applications:

Non-carcinogenic alternative to ethidium bromide.

### Description:

Atlas ClearSight RNA Stain is a new nucleic acid stain which can be used as a safer alternative to the traditional ethidium bromide for detecting nucleic acid in agarose gels. It is as sensitive as ethidium bromide and can be used exactly the same way in agarose gel electrophoresis.

Atlas ClearSight RNA Stain emits green fluorescence when bound to RNA or DNA. It has two secondary fluorescence excitation peaks (~270 nm; ~290 nm) and one strong excitation peak centered around 490 nm. The fluorescence emission is centered at ~530 nm. Thus, Atlas ClearSight RNA Stain is compatible with a wide variety of gel reading instruments.

Atlas ClearSight RNA Stain can be used for precast agarose gels and when better sensitivity is needed - poststaining is recommended.

This product has passed a quality control assay that verified the absence of detectable levels of ribonuclease activity.

### Protocol:

#### Precasting:

- 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.
- Add **10 µl** of Atlas ClearSight RNA Stain to the gel solution and mix it gently.
- Cool the gel to 60-70°C and cast the gel into the gel tray.
- When the gel is solid, load the samples and perform electrophoresis.
- Detect the bands under UV or LED illuminator.

#### Poststaining:

- For <0.5 cm thick agarose gel, 20-50 µl of the stain should be used per 100 ml of buffer.
- Optimal staining time (5 - 60 minutes) and the amount of the stain may depend on the thickness of the gel and the percentage of agarose.
- The Atlas ClearSight poststaining solution may be used 2-3 times. Staining solution to be reused should be preferably stored at room temperature in the dark.

### Notes:

- 0.4 ml of Atlas ClearSight RNA Stain is sufficient for approximately 4 L of agarose gel.
- The thickness of gel should be **<0.5 cm**.
- Repeated melting of gels containing Atlas ClearSight RNA Stain may result in low sensitivity.
- Atlas ClearSight RNA Stain is non-carcinogenic, but may irritate skin and eyes. Please wear gloves while handling.

**Safety warnings and precautions:**

Caution when using hot, viscous solutions! Use suitable safety gear and open bottle gently to avoid accidents.

Atlas ClearSight RNA Stain is non-carcinogenic and according to the Ames test it causes significantly fewer mutations than Ethidium bromide.

Atlas ClearSight RNA Stain is non-carcinogenic but may irritate skin and eyes.

This product is designed for research purposes and *in vitro* use only.

According to common laboratory safety practice, it is recommended to wear protective clothing, gloves and safety glasses. Please refer to [www.bioatlas.com](http://www.bioatlas.com) for Material Safety Data Sheet of the product.

*Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.*