

## ClearSight DNA Stain

Cat. No.	Pack Size
EUH40501	1 ml
EUH40501-ECHT	50 µl SAMPLE

### Storage & Shipping:

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

### Applications:

Non-carcinogenic alternative to Ethidium bromide.

### Description:

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

ClearSight DNA Stain emits green fluorescence when bound to DNA or RNA. 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, ClearSight DNA Stain is compatible with a wide variety of gel reading instruments.

ClearSight DNA Stain can be used for precast agarose gels and when better sensitivity is needed post staining is recommended.

### Safety:

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

### 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 **4-6 µl** of ClearSight DNA Stain to the gel solution and mix it gently.
- Cool the gel to 50-60°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 illuminator.

#### Post-staining:

- The ClearSight post-staining solution may be used 2-3 times. Staining solution to be reused should be preferably stored at room temperature in the dark.  
For <0.5 cm thick agarose gel, 10-25 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.

### Notes:

- 1 ml of ClearSight DNA Stain is sufficient for 17-25 L of agarose gel.
- The thickness of gel should **< 0.5cm**.
- Repeated melting of gels containing ClearSight DNA Stain may result in low sensitivity.
- ClearSight DNA Stain is non-carcinogenic but may irritate skin and eyes. Please wear gloves while handling.

### Safety warnings and precautions:

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.

*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.*