Ver. HB221107

YeaRed™ Nucleic Acid Gel Stain(10,000× in Water)

Product description

YeaRed is a unique oily macromolecule that can't penetrate cell membranes into cells. It is not easy to volatile and sublimation, and the human body will not inhale. The Ames test results also showed that YeaRed is completely mutagegenic at gel staining concentration and is a safe and non-toxic nucleic acid dye. YeaRed has the same spectral characteristics as EB, and there is no need to change the filter and observation device (ordinary UV gel transilluminator), and the UV light excitation detection at 300 nm is sufficient. YeaRed is suitable for dsDNA, ssDNA and RNA staining in agarose and polyacrylamide gel electrophoresis, and can be stained by glue dyeing method or bubble dyeing method, which is very convenient and flexible to use.

Components

Components No.	Name	10202ES76
10202	YeaRed™ Nucleic Acid Gel Stain (10,000× in Water)	500 μL

Specifications

Detection of positioning	Test in gel
Detection method	Fluorescence
Product Type Specs	Nucleic acid gel dye
Condition of carriage	Room temperature
Target molecule	DNA、RNA

Shipping and Storage

The product is shipped at room temperature and avoid light. It can be stored at room temperature for 5 years.

Instructions

Gel staining (same as EB, staining before electrophoresis)

1. Prepare an appropriate concentration of agarose gel and microwave until completely melted.
2. YeaRed nucleic acid dye was added to a final concentration of 1×.
3. Pour the agarose solution containing YeaRed nucleic acid dye into the glue-making machine and insert the comb, and set for about 30-60 min at room temperature.
4. Sample loading and electrophoresis were performed according to routine methods.
5. Ultraviolet photography observation.

Immersion staining method (staining after electrophoresis)

1. Prepare agarose gel of appropriate concentration and microwave until completely melted.
2. Pour the agarose solution into the gel-making apparatus and insert the comb, and solidify at room temperature

for about 30-60 minutes.

3. Load and electrophoresis as usual.

4. Dilute YeaRed 10,000 × aqueous solution to 3 × staining solution with 0.1 M NaCl solution (i.e., add 15 μL of YeaRed 10,000 × aqueous solution to 50 mL of 0.1 M NaCl solution, the stain solution can be reused about 3 times, stored at room temperature protected from light).

5. Place the gel in a suitable container and immerse the gel with 3 × staining solution. Stain at room temperature by shaking for about 30 min. The optimal staining time depends on the thickness and concentration of the gel. For gels containing 3.5~10% polyacrylamide, the staining time is usually between 30 min and 1 h, and it is extended with the increase of polyacrylamide content.

6. Ultraviolet photography observation.

Notes

1. If the macromolecular bands are tailing and the separation is not satisfactory, it is recommended to reduce the loading volume of DNA markers or nucleic acid samples.

2. Gel dyeing method is not suitable for prefabricated polyacrylamide gel, for polyacrylamide gel please use bubble dyeing method.

3. Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety!