WSE-7130

EzFluoroStain DNA

operating instructions

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1. Precautions for safe use of this product

To use this product safely, please read this instruction manual carefully first. Please refrain from operating the product until you fully understand the contents of this instruction manual. This instruction manual describes only how to use this product for the specified purpose. Please refrain from using the product for purposes or in ways not described in this instruction manual. If you use the product for purposes or in ways not described in this instruction manual, you are solely responsible for all necessary safety measures and unforeseen circumstances. Also, please carefully read and understand the instruction manuals of any devices you will be using at the same time.

2. Purpose of use

This product is a fluorescent reagent for staining double-stranded DNA in acrylamide gels and agarose gels separated by electrophoresis. The stained gel can be excited with UV or blue LED (450-480 nm) and observed by fluorescence of 500-600 nm (500-550 nm LP filter is suitable). This fluorescent staining reagent is safer than ethidium bromide and has high detection sensitivity.

3. Product Configuration

Name	Volume	Quantity
EzFluoroStain DNA	0.5mL	1

4. Composition

Name	Main components
EzFluoroStain DNA	DMSO

This Product does not contain any poisonous or deleterious substances under the Poisonous and Deleterious Substances Control Law, or any substances subject to notification that exceed the exemption amounts stipulated under the Industrial Safety and Health Law or the PRTR Law. For details, please download the SDS for this product from the ATTO website (https://www.atto.co.jp/).

5. Storage

- Store this product in a dark place and in a freezer (–20 °C or below). If unopened, it is stable up to the expiration date. The expiration date is printed on the outer box and reagent bottle.

6. Disposal method

- Dispose of each reagent in accordance with the disposal method of your affiliated institution .

7. Other items required besides this product

- Fluorescent gel imaging device (UV , Blue LED)
- Electrophoresis Equipment
- Agarose gel, acrylamide gel
- Electrode solution, etc.

8. Precautions for use

- If the undiluted solution comes into direct contact with a plastic container, the container may discolor or deform.
- If a glass container is used to stain a gel, the fluorescent reagent will be adsorbed to the glass. Be sure to use a plastic container for staining.
- This product is a fluorescent reagent that stains double-stranded DNA. Single-stranded DNA and RNA cannot be stained.
- This product is 10,000 times concentrated. Dilute with a buffer such as TAE, TBE, or TE before use. The diluted solution can be stored at 4℃ for about one week in the dark.
- After staining, detect the gel by exciting it with UV or Blue LED (Ex: 270, 370 and 497 nm, Em: 522 nm). Do not look directly at the irradiation device.
- This product can be detected by adding it directly to a gel or sample, but please note that the mobility of the bands may change.

9. How to use

1. Separate DNA by electrophoresis on an agarose or acrylamide gel.

2. Dilute this product 10,000-fold with a buffer such as TAE, TBE, or TE. For example, add 5 µL of this product to 50 mL of buffer and mix.

   *Depending on the dilution solution, this product may not completely dissolve and insoluble matter may be seen.

   In that case, first dilute this product 100 times with distilled water, then dilute 100 times with the desired solution to make a 10,000-fold dilution.

   *Wear gloves and be careful not to touch the product directly with your skin.

   *Use the diluted solution within 24 hours (room temperature). The diluted solution can be stored at 4℃ for about one week in the dark.

3. Immerse the gel after electrophoresis in the diluted staining solution from step 2 and incubate (in the dark) for 10 to 30 minutes.

   *When staining the gel, be sure to use a plastic container. If you use a glass container, the fluorescent reagent will adhere to the glass.

   *When staining the gel, cover the container with aluminum foil or similar to protect it from light.

   *Staining time varies depending on the thickness of the gel and the concentration of DNA.

   *Destaining is not required.

*After staining, the staining solution can be stored at 4 °C for approximately one week in the dark.

4.Place the stained gel in a gel imaging device (UV or fluorescent) and photograph it.

《Excitation/Emission filter》

UV excitation : 260~370 nm Filter : 500~580LP

Blue LED excitation: 440~500nm Filter : 500~580LP

*Peak is Ex: 270, 370, 497 nm, Em : 522 nm .

10. others

Even if the experimental procedure is the same protocol, slight differences in technique can lead to significantly different results. Tips and tricks are also important for obtaining optimal results. You can download materials containing various "experiment tips" from the ATTO website. You can load it, so please read it.

https:// www.atto.co.jp/

ATTO CORPORATION

3-2-2 Motoasakusa, Taito-ku, Tokyo 111-0041, JAPAN
Tel +81 3 5827 4863 / Fax +81 3 5827 6647
E-mail: eig@atto.co.jp
http://www.atto.co.jp/eng