

EpiQuik DNA Stain

(Catalog No. R12001)

Description

EpiQuik 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.

EpiQuik 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, EpiQuik DNA Stain is compatible with a wide variety of gel reading instruments.

EpiQuik DNA Stain can be used for precast agarose gels and when better sensitivity is needed – poststaining is recommended.

Applications

- Non-carcinogenic alternative to ethidium bromide
- Excellent for nucleic acid electrophoresis and purification applications

Storage Conditions

Store at 4°C, protected from light.

Safety

EpiQuik 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 EpiQuik 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 EpiQuik 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 ul 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 EpiQuik DNA Stain is sufficient for 17-25 L of agarose gel
- The thickness of gel should be < 0.5cm
- Repeated melting of gels containing EpiQuik DNA Stain may result in low sensitivity
- EpiQuik 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. Please refer to www.epigentek.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.

Ordering Information

Products EpiQuik DNA Stain Size 1 ml Cat. No. R12001-1