

HiQ BlueMango

Staining Solution (20,000x)

Cat No.	Pack Size
A0003	2×500μl
A0004	10×500μl

Product description

HiQ Blue Mango is a new and safe nucleic acid stain, an alternative to the traditional ethidium bromide (EtBr) stain for detecting nucleic acid in agarose gels. It emits green fluorescence when bound to DNA or RNA. This new stain has two fluorescence excitation maxima when bound to nucleic acid, one centered at 309nm and another at 419nm. In addition, it has one visible excitation at 514nm. HiQ Blue Mango is as sensitive as EtBr. The staining protocol for HiQ Blue Mango is similar to that for EtBr.

Characteristics

- Used for detecting double-strand DNA and single-stranded RNA.
- Alternative to the ethidium bromide staining.
- As sensitive as EtBr or more sensitive than that.
- Non-toxic, non-mutagenic and non-carcinogenic.
- No hazard waste.

Application

Visualization of DNA and RNA bands as they separate during agarose gel electrophoresis
Isolation of DNA fragments for subcloning without introducing mutations normally caused by EtBr.

Consideration before use

HiQ Blue Mango is non-carcinogenic but may cause skin and eye irritations. Please wear gloves when working with the product.

Protocol

① Prepare a 100ml of agarose gel solution (concentration from 0.8~3%) in a 250ml flask and mix it thoroughly. Place the flask in the microwave, and heat it until the solution is completely clear and small floating particles are visible (about 2~3minutes).

Note: The thickness of gel should be less than 0.5cm since thick gels may decrease sensitivity.

② Add 5 μ l of HiQ Blue Mango to the agarose solution. Swirl the flask gently to mix the solution and avoid forming bubbles.

③ While the agarose solution cools, pour it into the gel tray until the comb teeth are immersed about 1/4~1/2 into the agarose.

Note: Repeated melting of gels containing HiQ Blue Mango may result in low sensitivity.

④ Allow the agarose gel to cool until solidified. Load samples on the gel and perform electrophoresis.

⑤ Detect the bands under UV illumination.

Note: HiQ Blue Mango allows visualization of DNA (>50ng) in the agarose gel under visible light. This eliminates the need for exposure to UV light, which may nick and damage DNA. The intact DNA fragments purified from agarose gel can increase the efficiency of subsequent molecular biology manipulations such as cloning, transformation and transcription.

Storage and stability

Store at 4°C for up to 12months. For longer periods, store at -20°C. HiQ Blue Mango is light sensitive and should be stored protected from light.