

PPL DNA View

Cat.no. P1000T

Storage: Store at room temperature or 4°C

Product size: 500ul/vial

PPL DNA view is an innovated nucleic acid stain to replace highly toxic ethidium bromide (EtBr) for detecting nucleic acid agarose gels. It emits green fluorescence when bound to DNA and RNA. PPL DNA view is as sensitive as EtBr and the staining protocol is also very similar, however, compared to EtBr, which is known as a strong mutagen, PPL DNA view causes much fewer mutations in the Ames test. In addition, it has a negative result in mouse marrow chromophilous erythrocyte micronucleus test and mouse spermary spermatocyte chromosomal aberration test. Most importantly, it is not considered hazardous waste, can be disposed of according to standard laboratories procedures, and is stable for years. (excitation: 309, 419, 541 nm; emission: 537 nm)

Protocol:

1. Prepare 100 ml of agarose gel solution (0.8%-3%) in a 250 ml flask.
2. Heat the flask in the microwave until the solution is clear.
3. Add 5ul ~10ul PPL DNA view to the gel solution. Swirl the flask gently to mix the solution and avoid forming bubbles.
4. After polymerization, perform gel electrophoresis and detect the bands under UV illumination.

Recommendations

1. The thickness of gel should be less than 0.5cm since thick gels may decrease sensitivity.
2. Repeatedly melting gels containing PPL DNA view may cause low sensitivity. PPL DNA view allows visualization of DNA (>50 ng) in agarose gels under visible light. This eliminates the need for exposure to UV light, which can 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.

The product is for research only, not for diagnostic and clinical use.