innoQ™ DNA stain

GDYE-001-500

Introduction

The innoQ™ DNA stain replaces toxic Ethidium Bromide (EtBr) for the visualization of double-stranded DNA, single-stranded DNA, and RNA in agarose and polyacrylamide gel electrophoresis.

The innoQ™ DNA stain has 2 fluorescence excitation wavelengths in the UV range (~270nm; ~290nm) and one in the blue light range (~485nm). Its maximum fluorescence emission is at ~525nm (green). Therefore, innoQ™ DNA stain is compatible with a large variety of gel documentation systems.

Features

- ✓ Easy to Use: you can directly replace EtBr without changing your existing imaging system
- ✓ Safe: Non-carcinogenic by the AMES test
- ✓ Sensitive: Increase your sensitivity by reducing nonspecific background fluorescence
- ✓ Non-carcinogenic alternative to Ethidium bromide (EtBr).

Specifications

- ✓ Concentration: 20.000 X
- ✓ Excitation spectra: 270-490 nm (Tree fluorescence excitation peaks: 270 nm, 295 nm and one strong excitation peak 490 nm
- ✓ Excitation maximum, nm: ≈ 490 nm
- ✓ Emission maximum, nm: ≈530 nm
- ✓ Excitation light source: UV

Storage

You may store the innoQ™ DNA stain at any temperature between 2°C to 8°C protected from light. Do not freeze.

Product use limitation

This product is developed, designed, and sold exclusively for research purposes and use only. The product is not intended for diagnostics or drug development, nor is it suitable for administration to humans or animals

Protocol

Pre-casting protocol

500 µl of this stain is enough for 10 L of agarose gel

1. 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
2. Add 4-6 µl of the stain to the gel solution and mix it gently
3. Cool the gel to 50 – 60 ºC and cast the gel into the gel tray
4. When the gel solidifies, load the samples and perform electrophoresis
5. Detect the bands under UV illuminator. They can also be viewed with Blue LED light. Yellow or green gelatine or cellophane filters should be used for photography

Post-staining protocol

1. For <0.5 cm thick agarose gels, 10-15 µL of stain should be used per 100 mL of buffer
2. Incubate the gel in staining solution for 10-30 minutes. Staining time varies with the thickness of the gel and percentage of the agarose
3. The post-staining solution may be used 2-3 times. If the staining solution was about to be reused it should be preferably stored at room temperature in the dark