FroggaStain Plus, Nucleic Acid Stain

Cat# FBSTAIN
Size: 1 ml
Concentration: 20,000×

Description

FroggaStain Plus is a fluorescent stain alternative to ethidium bromide (EtBr), commonly used in Molecular Biology laboratories to stain for the detection of nucleic acids in agarose gels. FroggaStain Plus emits a green fluorescence when bound to DNA or RNA, making it a safer choice for your lab's experiments. Our nucleic acid stain has two fluorescence excitation maxima (267 nm and 294 nm) and one visible excitation at 491 nm when bound to nucleic acid. The Fluorescence emission of FroggaStain Plus bound to DNA is centered at 530 nm.

Storage

Store at 4 ˚C for 2 years.

Protocol

1. Prepare 100 mL of agarose gel solution (concentration from 0.8~2%) in a 250 mL flask, mixing thoroughly. Place the flask in the microwave, heating slowly until the solution is completely clear. No visible agarose particles should be present.
2. Add 2-5 µL of FroggaStain Plus to the gel solution. Swirl the flask gently to mix the stain into the solution evenly.
3. While the gel and stain solution cools, pour it into the gel tray until the comb teeth are immersed about 25-50% into the gel, or as per your labs protocol.
4. Allow the agarose gel to solidify, then load your samples on the agarose gel and perform electrophoresis as typical in the lab.
5. Once your electrophoresis is complete, you can detect nucleic acid bands under UV/LED illumination.

Note

1. The thickness of your agarose gel should be less than 0.5 cm, thick gels may decrease sensitivity at the time of analysis.
2. Repeated melting of prepared agarose gels containing FroggaStain Plus may result in lowered sensitivity. We recommend making fresh agarose gel and stain solutions before each experiment.
3. FroggaStain Plus allows for visualization of DNA (>10 ng) in the agarose gel under visible light. This eliminates the need for UV light exposure, which can damage DNA quality. DNA fragments purified from agarose gel visualized using visible light can increase the efficiency of subsequent molecular biology manipulations such as cloning, transformation and transcription.
4. FroggaStain Plus may irritate the skin and eyes with direct or prolonged exposure. Please wear gloves and a lab coat when handling this product.