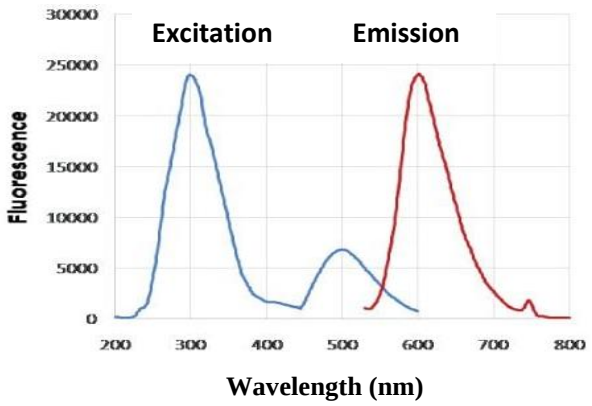
Gel Red Stain Solution 10000x in Water (Catalog: TBS5079)

Description

Gel Red Stain Solution is designed to replace Ethidium bromide (EtBr) for staining dsDNA, ssDNA or RNA in agarose gels, and polyacrylamide gels. Gel Red Stain and EtBr have virtually the same spectra (Fig1.), so you can directly replace EtBr with Gel Red Stain without changing your existing imaging system. In addition, Gel Red Stain is far more sensitive than EtBr. It is a safe, stable, and sensitive fluorescent nucleic acid dye.

Fig. 1: Absorption and Emission Spectrum



Main Features

- **Easy to Use:** Provided as a 10,000X stock and compatible with both UV light and blue light.
- **Stable:** Store at room temperature (18-25°C).
- **Sensitive**: Detect as little as 0.6-1 ng of DNA per gel band with minimal background fluorescence.
- **Safe:** Non-carcinogenic.

Pack Size

0.5mL/ each

Concentration

10,000x in water

Storage

Room Temperature for 1year

Assay Protocol

Post Staining Protocol:

1. Run gels as usual according to your standard protocol.
2. Dilute Gel Red Stain10,000X stock for 3,300x in H2O to make a 3X staining solution. For example, 33 µL of Gel Red Stain stock into 100 mL water.
3. submerge the gel with 3x stain solution in a suitable container such as a polypropylene staining tray.
4. Agitate the gel gently at room temperature for ~30 minutes.
5. View the stained gel under UV or gel imager with a standard transilluminator (302 or 312 nm).
6. Staining solution can be reused at least 2-3 times. Store staining solution at room temperature protected from light.

Precast Protocol for Agarose Gels:

1.Prepare molten agarose gel solution using your standard protocol.
2. Add 10 µL of the Gel Red 10,000X stock into the 100mL of the molten agarose gel solution at 1:10,000, and mix thoroughly. Gel Red Stain can be added while the gel solution is still hot.
3. Cast the gel and allow it to solidify.
4. Load samples and run the gels using your standard protocol.
5. View the stained gel under UV or gel imager with a standard transilluminator (302 or 312 nm).
6. Unused agarose containing Gel Red can be remelted to cast more gels, but it may be necessary to add more dye for optimal signal. We do not recommend storing agarose containing Gel Red in molten form (i.e., at 50°C) for more than a few days.

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