

Catalog No.: **C139**

Product Name: **DNA SafeStain Plus**

Size: **500 μ l**

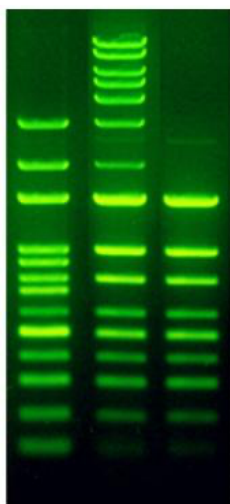
Concentration: **10,000X**

Description: **DNA SafeStain Plus** is a highly sensitive green fluorescent DNA/RNA staining reagent for detecting nucleic acids in agarose and polyacrylamide gels. This unique stain gives high sensitivity for detection of double-stranded or single-stranded DNA and RNA. Gels can be post-stained or the stain can be added to gels during gel casting or to the gel running buffer. **DNA SafeStain Plus** has two excitation wavelength peaks at about 290nm and 490nm, and an emission wavelength at 530nm, making it compatible with a standard UV light box, a blue-light transilluminator, or a gel reader equipped with visible light excitation; such as, a 488 nm laser-based gel scanner.

DNA SafeStain Plus is in a 10,000X concentrated format that can be easily diluted 10,000 times for use in precast gel staining, or 5,000 times for use in post gel staining.

Samples stained with **DNA SafeStain Plus** are compatible with downstream molecular biology applications; such as, gel extraction, and cloning.

Storage: at Room Temp., under dark conditions.



Gel stained with **DNA SafeStain Plus**.

User Instructions:

Note: Warm product to room temperature, mix and spin well before use.

A. Post-staining Protocol

1. Run gels as usual according to your standard protocol.
2. Dilute the **DNA SafeStain Plus** stock reagent 5,000 fold to make a staining solution in TE, TBE, TAE, or simply water. For example, add 20 μ l of **DNA SafeStain Plus** to 100ml of staining solution.
3. Place the gel in a suitable plastic container. Add a sufficient amount of the staining solution to submerge the gel.
4. Agitate the gel gently at room temperature for 20 min.
5. Wash the gel with water to remove any excess dye. Image the stained gel with a transilluminator, or a laser-based gel scanner using a long path green filter; such as, a SYBR Filter, or a GelStar filter.

B. Pre-cast Protocol

1. Prepare agarose gel solution using your standard protocol; such as, by using a microwave to melt the agarose.
2. Dilute the **DNA SafeStain Plus** stock reagent 10,000 times into the agarose gel solution, and mix evenly. For example, add 10 μ l of **DNA SafeStain Plus** to 100ml of agarose gel solution.
3. Cast the gel.
4. Load samples and run the gels using your standard protocol.
5. Image the gel with a transilluminator, or a laser-based gel scanner using a long path green filter; such as, a SYBR Filter, or a GelStar filter.

Note: 1. Best results can be obtained by adding the DNA staining reagent into the agarose gel running buffer. For example, add 100 μ l **DNA SafeStain Plus** to 1 liter of 1X running buffer (1x TAE or 1x TBE), and use this buffer to make the agarose gel, and to run the gel.

Note: 2. The pre-cast protocol is not recommended for polyacrylamide gels. Use the post staining protocol for acrylamide gels.