

WebGreen DNA Stain

Ethidium bromide (EB) is the most commonly used nucleic acid stain in molecular biology laboratories. It has been proved to be strong carcinogen and therefore considered hazardous for laboratory personnel and environment.

WebGreen DNA Stain is a nucleic acid stain, which can be used as a safer alternative to the traditional Ethidium bromide stain for detecting nucleic acid in agarose gels. It is as sensitive as Ethidium bromide and can be used exactly the same way in agarose gel electrophoresis.

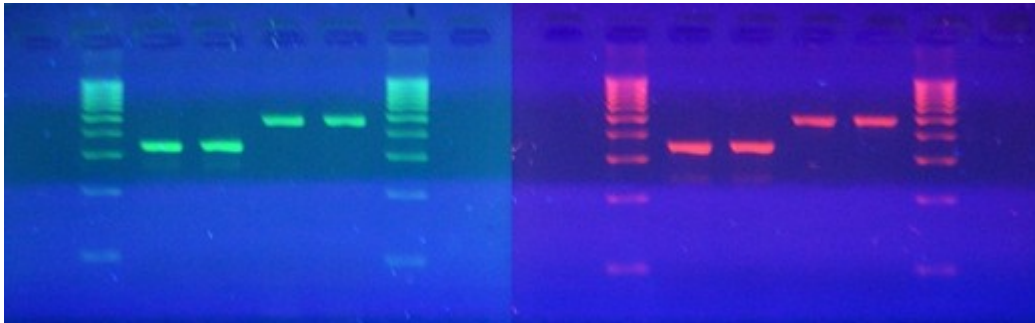


Figure 1 Agarose gels, stained by WebGreen DNA Stain (A) and Ethidium bromide (B).

Safety: WebGreen DNA Stain was tested in the mouse bone marrow micronucleus test to evaluate the genotoxic potential of this new dye. The result was negative (in contrast to Ethidium bromide and other dyes) Furthermore the dye was applied to a chromosome aberration test. We can state that WebGreen is non-carcinogenic and according to the Ames test it causes significantly fewer mutations than Ethidium bromide

Protocol:

- 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.
- Add 2-5 μ l of WebGreen DNA Stain to the gel solution and mix it gently.
- Cool the gel to 50-60°C and cast the gel, into the gel tray.
- When the gel is solid, load the samples and perform electrophoresis.
- Detect the bands under UV illuminator.

Notes: The thickness of gel should be < 0.5cm. Repeated melting of gels containing WebGreen DNA Stain may result in low sensitivity. **WebGreen DNA Stain is non-carcinogenic but may irritate skin and eyes. Please wear gloves while handling.**

Disposal: WebGreen is not classified as hazardous waste, thus can be safely disposed of down the drain or as regular waste. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Storage: Store at room temperature or at 4°C. Protect from prolonged exposure to light and direct sunlight.

Business & Technology Centre, Radway Green Venture Park,
Radway Green, Crewe. CW2 5PR