

Product Information

SafeGreen™ Loading Dye

Catalog Number	Packaging Size
D012	1 mL

Storage upon receipt:

- -20°C
- Protect from light

Ex/Em: 500/530 nm, bound to nucleic

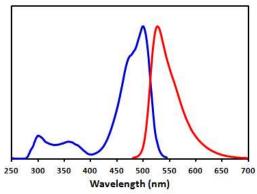
Product Description

SafeGreen Loading Dye is a safe and highly sensitive fluorescent stain for detecting nucleic acids in agarose gel. This single stain gives high sensitivity detection of double-stranded or single-stranded DNA and RNA. The stain is simply mixed with DNA samples, and run the gels, providing a simple and fast protocol. SafeGreen Loading Dye is compatible with a standard 300 nm transilluminator, a 254 nm transilluminator, a blue-light transilluminator, or a gel reader equipped with visible light excitation such as a 488 nm laser-based gel scanner.

SafeGreen Loading Dye is a ready-to-use solution. The stain is premixed with DNA samples and/or DNA ladder at 1:5 ratio before running the gel. For example, for every 5 μ L DNA samples, adding 1 μ L of stain reagent. One vial (1 mL) of stain reagent can be used to run at least 1000 DNA samples.

Gel staining with **SafeGreen Loading Dye** is compatible with downstream applications such as gel extraction and cloning. **SafeGreen Loading Dye** is efficiently removed from DNA by phenol/chloroform extraction and ethanol precipitation.

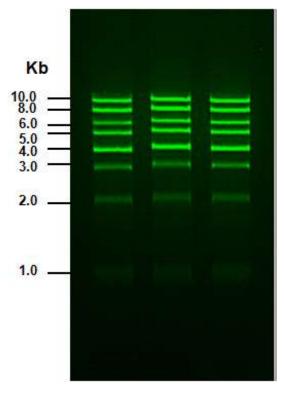
Spectral Characteristics



Excitation (blue) and emission spectra (red) of SafeGreen bound to dsDNA in TBE buffer

Protocol

- 1. Prepare molten agarose gel solution, cast the gel and allow it to solidify using your standard protocol. (Unnecessary to add any DNA stain reagent.)
- 2. Mix the DNA samples and/or DNA ladder with **SafeGreen Loading Dye** at 5:1 ratio.
- 3. Load samples and run the gels using your standard protocol.
- 4. 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 GelStar filter.



SafeGreen Loading Dye

Related Products

Catalog No. Product

D013 SafeRed™ Loading Dye, 1 mL