



## SafeRed™ Loading Dye in 6X DNA Loading Buffer

Catalog Number	Packaging Size
D013	1 mL

### Storage upon receipt:

-20°C

Protect from light

**Ex/Em:** 520/610 nm, bound to nucleic acid

## User Manual

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USA

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866-360-9531

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[www.genecopoeia.com](http://www.genecopoeia.com)

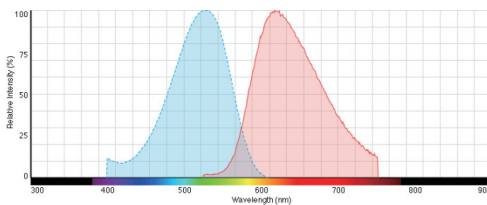
## I. Product Description

**SafeRed Loading Dye** is a safe and highly sensitive fluorescent stain for detecting nucleic acids in agarose and polyacrylamide gels. 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. **SafeRed Loading Dye** is compatible with a standard 300 nm transilluminator, or a laser-based gel scanner using an EtBr filter.

**SafeRed Loading Dye in 6X DNA Loading Buffer** 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  $\mu$ L DNA samples, adding 1  $\mu$ L of stain reagent. One vial (1 mL) of stain reagent can be used to run at least 1000 DNA samples.

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

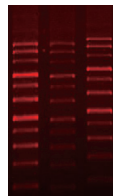
## II. Spectral Characteristics



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

## III. 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 **SafeRed Loading Dye** at 5:1 ratio.
3. Load samples and run the gels using your standard protocol.
4. Image the stained gel with a standard 300 nm transilluminator, or a laser-based gel scanner using an EtBr filter.



SafeRed Loading Dye

## IV. Related Products

Catalog Number	Product
D012	SafeGreen™ Loading Dye in 6X DNA Loading Buffer, 1 mL