

LiGreen™ Loading Dye

Cat. #: M0052 Size: 2 ml

Introduction

LiGreen™ 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. LiGreen™ 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.

LiGreen™ 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 µl DNA samples, adding 1 µl of stain reagent. One vial (1 ml) of stain reagent can be used to run at least 1000 DNA samples.

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

Package Information

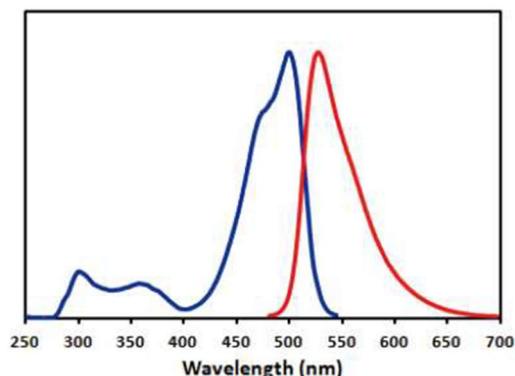
Components	M0052
LiGreen™ Loading Dye	2 ml

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

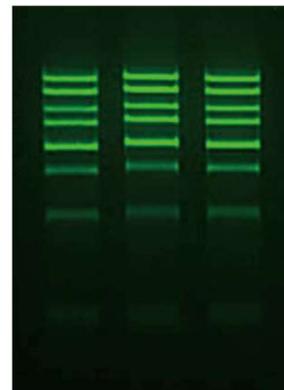
Storage

Store at -20°C and protect from light.

Spectral Characteristics



Excitation (blue) and emission spectra (red) of LiGreen™ Loading Dye bound to dsDNA in TBE buffer



LiGreen™ Loading Dye

Protocols

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.