

Product Information

3×GelstainRed Prestain Loading Buffer

Catalog Number: S2025S, S2025M, S2025L

Product Size: 0.1 mL, 1 mL, 10 mL

Storage

Store at 4°C and protect from light. Expiration date marked on the outer packing.

Description

GelstainRed is a sensitive, stable and environmentally safe fluorescent nucleic acid dyes designed to replace the highly toxic ethidium bromide (EtBr). GelstainRed are gel loading buffers containing tracking dyes. 3×GelstainRed Prestain Loading Buffer contains two blue electrophoresis tracking dyes that run at approximately 1.5 kb and 200 bp in a 1% agarose gel. 3×GelstainRed Prestain Loading Buffer can be added directly to the DNA sample before loading. There is no need to add nucleic acid dyes to the agarose gel in advance, so it is more convenient and fast.

GelstainRed and EtBr have virtually the same spectra, so you can directly replace EtBr with GelstainRed without changing your existing imaging system. In addition, GelstainRed is compatible with downstream applications such as sequencing and cloning. GelstainRed is efficiently removed from DNA by commercial gel extraction kits or by phenol/chloroform extraction and ethanol precipitation.

Protocol

1. Prepare agarose gel according to your standard protocol. Do not add ethidium bromide, GelstainRed, or any other fluorescent DNA dye to the agarose.
2. Briefly vortex 3×GelstainRed Prestain Loading Buffer. Add buffer to DNA samples at a volume ratio of 1:2.
3. Load samples and run gels according to your standard protocol.
4. Visualize bands using a UV transilluminator. Gels can be imaged using an ethidium bromide emission filter. SYBR Green or GelStar filters also can be used for gel imaging with equally good results.

Notes

1. It is recommended to use 1 × TBE buffer instead of TAE, because the reagent containing borate has better conductivity.
2. The voltage should not be too high during electrophoresis. Generally, TBE should not exceed 120 V, and TAE should not exceed 100 V.
3. When the sample concentration is large, the product can also achieve a better result.

