# **Product Information**

## GelstainRed<sup>TM</sup>, 10,000× in water

Catalog Number: S2009S, S2009L Product Size: 0.1 mL, 0.5 mL

### Storage

Store at room temperature. Expiration date marked on the outer packing.

## Description

GelstainRed<sup>TM</sup> is a highly sensitive, stable, non-toxic, non-mutagenic fluorescent nucleic acid dye (working concentration). The spectra of GelstainRed<sup>TM</sup> is the same as EtBr, so it can replace EtBr without changing imaging system. In addition, GelstainRed<sup>TM</sup> is far more sensitive than EtBr.

## Protocol

#### Pre-cast Protocol for Agarose Gels

1. Add GelstainRed<sup>TM</sup> to molten agarose at  $1 \times$  final concentration. For example, add 5 µL of  $10,000 \times$  GelstainRed<sup>TM</sup> to 50 mL agarose. GelstainRed<sup>TM</sup> can be directly added into hot gel solution. And it also can be mixed with TAE or TBE buffer containing agarose powder in advance before heating.

2. Load samples and run gels according to your standard protocol.

#### **Post-Stain Protocol**

1. Run gel as usual according to your standard protocol.

2. Add a sufficient amount of  $3 \times \text{staining solution to submerge}$ the gel.(i.e., add 15 µL 10,000× GelstainRed<sup>TM</sup> to 50 mL H<sub>2</sub>O ). 3. The gel can be put into the dye solution which pre-heated to about 70°C and incubated for 10min.(if the dye solution is not heated,to agitate the gel gently at room temperature for ~30 minutes.). For polyacrylamide gels, typical staining time is 30 min to 1 hour with gels of higher acrylamide content requiring longer staining time. Store staining solution at room temperature protected from light.

#### Notes

1. TAE and TBE have different conductive properties. To shorten the electrophoresis time, TAE buffer can be used.

2. The dye does not need to be refrigerated at low temperature. Please store it at room temperature to avoid precipitation. If precipitation is found, please heat the dye to 45-50°C for 2 min and dissolve by shaking without affecting the effect.

3. GelstainRed<sup>TM</sup> can be used to stain single-stranded DNA and RNA, but its sensitivity to single-stranded DNA or RNA is lower than double-stranded DNA.

4. If the band is smeared or not good separation, we recommend post-stain to eliminate the effect of dye.

