

AvanSafe[™] Red DNA Dye

Product contents: P/N: ASRDY-10000, 1x0.5ml, sufficient for approximately 100x50ml or 50x100ml agarose gels

Introduction:

Safe Red DNA Dye is a non-carcinogenic alternative to Ethidium bromide used for the detection of nucleic acids in agarose gels. It is as sensitive as Ethidium bromide. There is no toxic DMSO **as AvanSafe Red is supplied in 10,000X in water.**

Protocol:

Note : TBE buffer system is preferred for higher sensitivity. If smeared DNA bands or discrepant DNA migration were observed in pre-stained gels, please reduce the amount of DNA to at least 1/3 to 1/5 or perform the post-staining instead.

PRE-STAIN:

•Wait for melted agarose to be cooled to 50 to 60 $^{\circ}$ C, then add 5 μ l per 50ml of agarose solution (concentration from 0.8-3.0%) or 10 μ l per 100ml of agarose, swirl and mix well.

OR

POST-STAIN :

•Use 30 μl per 100 ml of 0.1M NaCl solution. Place the gel in a suitable container. Add a sufficient amount of the staining solution to submerge the gel. For an average gel thickness of about 0.5 cm, stain 30 minutes. Protect gel and staining solution from light with aluminum foil or place in dark.

•Optimal staining time and the amount of stain may depend on the thickness of the gel and the percentage of agarose.

•Do store in the dark between use.

DETECTION :

•Detect bands under standard UV transilluminator (302 or 312 nm).

•AvanSafe[™] Red has fluorescence excitation maxima at approximately 275 nm. The fluorescence emission maxima is about 590 nm when bound to dsDNA in TBE.

Shipping and Storage Conditions :

Shipped in RT Stored in RT and always protected from light