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AvanSafe™ DNA Dye

Product contents: P/N: ASDY-20000, 1x1ml, sufficient for 17 – 25 liters of agarose

Introduction:

Safe 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 is supplied in water.

Protocol:

Note : It is highly recommended agarose to be ≦0.5cm in thickness. TAE buffer system is preferred for higher sensitivity.

PRE-STAIN :

- Add Safe DNA Dye to melted agarose when the agarose has cooled to 50 to 60℃.
- Use 3 to 6 µl per 100 ml of agarose gel solution (concentration from 0.8-3.0%) .

OR

POST-STAIN :

- Use 10 to 25 µl per 100 ml of staining solution (same as when using ethidium bromide). For <0.5 cm thick agarose gels, 10-15 µL of stain should be used per 100 mL of buffer.
- Optimal staining time (5-60 minutes) and the amount of stain may depend on the thickness of the gel and the percentage of agarose. For an average gel thickness of about 7 mm, stain 30 minutes, followed by a destain of 30 min in water.
- Can reuse the staining solution up to 3 times. Store in the dark between use.

DETECTION :

- Detect bands under UV illumination (yellow or green gelatin- or cellophane filters is recommended for clearer bands) or non-UV LED illumination such as Blue Light LED illumination.
- AvanSafe™ has fluorescence excitation maxima at 295 nm and 490 nm. The fluorescence emission maxima is similar to EtBr when bound to DNA – at 530 nm.

Shipping and Storage Conditions :

Shipped in RT

Store in RT for short term (1 month), in 4℃ for long term, always protected from light

Storage at -20 ℃ may degrade Safe DNA Dye.