TIARISTAIN™ DIRECT Green Safe

(Molecular Biology Grade)

Ordering info

TBR0285, TIARISTAIN™ DIRECTGreen Safe, 25 µL

TBR0286, TIARISTAIN™ DIRECT Green Safe, 1 mL

Description

TIARISTAIN™ DIRECT Green Safe is a new formulation to stain nucleic acids in agarose and polyacrylamide gels. The dye has been developed for direct loading and is compatible with both UV and Blue LED transilluminators. It emits a green fluorescence when bound to nucleic acids. TIARISTAIN™ DIRECT Green Safe has a strong excitation peak at ~490 nm enabling the use of less DNA destructive blue light instead UV light. The dye has also two excitation peaks in the ultraviolet range (~270nm; ~290nm). Maximum fluorescence emission is at ~515nm (green).

There is no need to add any dye to the gel or running buffer: just add TIARISTAIN™ DIRECT Green Safe direct to your sample and perform electrophoresis.

Features

- Safe (non-carcinogenic, non-mutagenic, non-toxic).
- Direct Loading (no need for loading dye)
- High sensitivity, 0.1-1.0 ng DNA per band.
- No dangerous waste

Applications

- Non-carcinogenic alternative to ethidium bromide nucleic acid stain.

Storage

Store at 2-8 °C, Protected from light. Do not freeze!

The product is shipped at room temperature.

Quality Control

DNase/ RNase activity not detected.

Recommended devices

Transilluminators with blue light (470-520 nm), ultraviolet light (preferable with low pressure lamp 254 nm; high pressure 365 nm but excitation is less efficient).

Also available:

- *TBR0226, TIARISTAIN™ Green Safe, 1 mL*

PROTOCOL

¡ Wear gloves while handing!

1. Prepare agarose solution by mixing the desired amount of agarose and desired volume of electrophoresis buffer (0.5 - 3% in TAE or TBE Buffer 1x).
2. Heat the solution until all the agarose is completely melted.
3. Cool down the solution to ~60°C and pour into the tray.
4. Once the gel is solid, load the samples: Mix samples (and DNA marker) with TiariSTAIN™ DIRECT Green Safe in a 10:1 ratio (e.g. 10µl of sample with 1µl of TiariSTAIN™ DIRECT Green Safe) and load onto gel. There is no need to add any other loading buffer.
5. Run gel according to normal procedure.
6. Visualize using either UV or Blue LED light.