

# tinto rang™

## DNA GEL STAIN USER GUIDE

### About tinto rang™

tinto rang™ is the safest DNA stain available. Being a MGB/EB it is fast (post staining incubation ranging from 30 seconds to 5 minutes), shows high sensitivity and enhanced fluorescence upon binding to DNA. The stain is plant based food grade product making it non-toxic, non-hazardous and eco-friendly. tinto rang™ works best with all standard Gel Doc systems with various filters available. The stain is known to work across a wide range of pH and temperature, ensuring activity even on boiling with agarose for gel casting.

### tinto rang™ Features

- More sensitive than Ethidium Bromide
- Stains DNA in 1-5 mins
- Does not Inhibit PCR
- Allows Multiple Runs without Distorting Samples
- High stability and low background noise

### Protocol

- **Post staining:** For a volume of 50 ml of the TAE buffer, add 5ul of 10,000x tinto rang. Pour the buffer with the dye gently in a proper sized staining tray, not too big than the gel. Make sure that the gel is immersed completely in the stain. Dip the gel and shake gently for the gel to take up the stain. Incubate for 30 seconds to 5 minutes. washing is not necessary.
- **Precasting with gel:** For a volume of 50 ml of the TAE buffer, add 10ul of 10,000x tinto rang. Add adequate amount of agarose for the required pore size. Cast the gel, load samples along with loading dye and run. NOTE: tinto rang™ does not interfere with the mobility of DNA.
- **Loading dye with the sample:** Add 1 ul of tinto rang and appropriate amount of loading dye to the DNA sample (upto 50 ul), mix well load and perform the run.

### Visualization

Gels stained with tinto rang can be visualized with all present Gel-Doc systems with available filters and very clear and crisp bands were seen in all. In some gel-docs, exposure times may need to be adjusted to get clear bands. Few of the commonly used gel-docs and their optimised exposure times are given below.

Device Vendor Name	Device Series/ Type	Optimum exposure time
Bio-rad	Molecular Imager® Gel Doc™ XR+ System with Image Lab™ Software (170-8195)	Auto exposure using EtBr filter
GE	Image Quant LAS - 500	1sec
Bio-rad	ChemiDoc™ XRS+ System with Image Lab™ Software (170-8265)	Auto exposure using EtBr filter
UVI TECH	FireReader V10	500msec

### FAQs

Q: Unable to view bands or faint band while using gel doc systems.

A: tinto rang™ has a different Em and Ex compared Ethidium Bromide or SYBR Safe, SYBR Gold or SYBR Green. Gel doc systems may require a one time configuration to suit tinto rang™, Please contact [alx@azooka.life](mailto:alx@azooka.life) or [drb@azooka.life](mailto:drb@azooka.life) if you face any issues.