

## — PROTOCOL —

## Novel Juice Supplied in 6X Loading Buffer

Catalog Number	Unit Size
LD001-1000	1ml(Reagent)
LD001-1000S	50ul(Reagent)

### Storage

Stable for up to 12 months at 4°C.

Stable for up to 24 months at -20°C.

Novel Juice Dye is light sensitive and should be stored protected from light.

### Description

Novel Juice is a non-mutagenic fluorescent reagent that produces an instant visualization of DNA bands upon Blue Light or UV illumination of agarose gels. Supplied in 6X DNA Loading Buffer, Novel Juice is used to prepare DNA markers and samples for loading on agarose or polyacrylamide gels. Novel Juice is the most sensitive stain available for detecting the double-stranded DNA (dsDNA). It contains three tracking dyes (Bromophenol Blue, Xylene Cyanol FF, and Orange G) for visually tracking the DNA migration during the electrophoresis process. It is ideal for the environment requiring a safe, non-hazardous alternative to Ethidium Bromide. The recommended DNA mass of sample is more than 50 ng. (This will not cause obvious shift)

### Applications

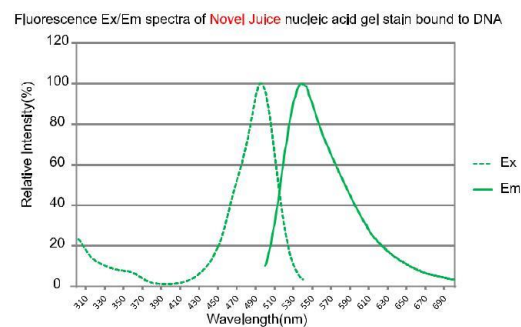
1. Vortex Novel Juice for 10 seconds prior to use.
2. Dilute 1 part Novel Juice with 5 parts DNA sample and mix.

Note: Novel Juice must be added to DNA markers in order to visualize the ladder bands simultaneously with the sample after electrophoresis.

3. Load sample and run according to standard procedures.
4. After the electrophoresis, remove gel and place on UV or a visible -light transilluminator to immediately visualize bands.
5. Gels can be post-stained with Ethidium Bromide if desired.

### Tracking Dyes

Bromophenol Blue, Xylene Cyanol FF, and Orange G.



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### Novel Juice keeps your lab safe

Safe – Absence of mutagenity.

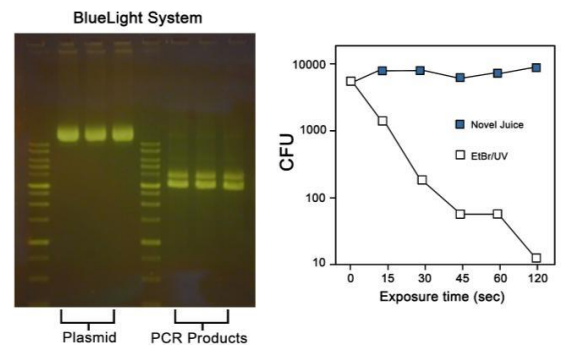
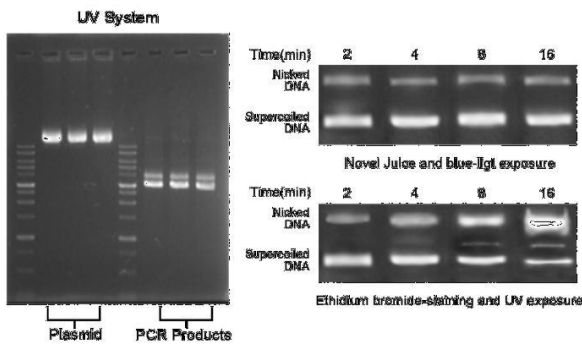
Low Environmental Impact – Compliance with the Clean Water Act standards. No water pollution concern. Sensitivity – High degree of sensitivity as Ethium Bromide.

Convenience – Ready to Use; Same application procedures as the 6X Loading Dye.

Speed – No de-staining requirement, low background value, and image displayed after coupling with the nucleic acid. Compatibility – Use the Blue Light or UV to detect the signal; Broad compatibility range.

Economic – Non-hazardous product; No expenses required for the waste management.

### Less DNA damage, improved cloning efficiency



Slower migrating species are indicative of a linear or relaxed circular vector resulting from DNA nicking or strand breaks.

PCR fragments separated on agarose gels containing ethidium bromide or novel juice were exposed to UV or blue light for specific amounts of time, then used for subcloning. Even brief ethidium bromide/UV treatment yielded significantly fewer CFUs.