

## Novel Juice *Supplied in 6X Loading Buffer*

Cat. No.: SL001-1000

Size: 1000 µl

Cat. No.: SL001-0050

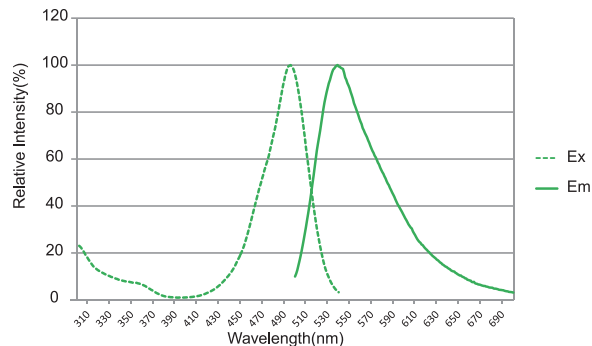
Size: 50 µl



### Description

Novel Juice is a non-mutagenic fluorescent reagent that produces instant visualization of DNA bands upon Blue Light or UV illumination of agarose gels. Supplied in Simply's 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. Approximate fluorescence excitation/emission maxima: 300, 495/537 nm, bound to nucleic acid.

Fluorescence Ex/Em spectra of **Novel Juice** nucleic acid gel stain bound to DNA



### Tracking Dyes

Bromophenol Blue, Xylene Cyanol FF, and Orange G.

### Quality Control

The quality of the Novel Juice is tested on a lot-to-lot basis to ensure consistent product quality.

### Storage

Store at 4°C up to 12 months. For longer periods, store at -20°C.

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

### Recommendations for Loading

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.

### Novel Juice keeps your lab safe

**Safe** – Absence of mutagenity and low toxicity (LC>5000mg/kg) as compared to Ethium Bromide.

**Low Environmental Impact** – Compliance with the Clean Water Act standards. No water pollution concern.

**Sensitivity** – High degree of sensitivity as Ethium Bromide.

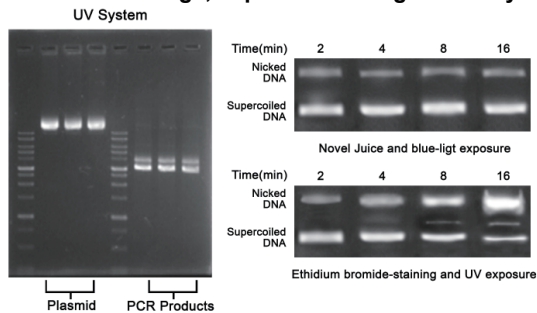
**Convenience** – Ready to Use; Same application procedures as the 6X Loading Dye.

**Speed** – No de-staining requirement, low background value, and image displayed after coupling with the nucleic acid.

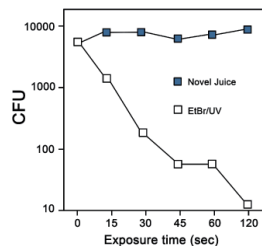
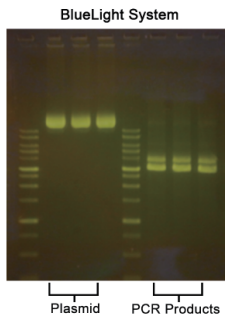
**Compatibility** – Use the Blue Light or UV to detect the signal; Broad compatibility range.

**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.

## Related Ordering Information

Cat. No.	Description	Package
SA001-0500	Agarose Tablets	0.5g x 100 Tablets
BK001	BLooK LED transilluminator	1 each
SM101-0500	<i>Taq</i> DNA Polymerase	500 units
SM203-0100	OnePCR™	100 Reactions
SD010-R600	1Kb DNA Ladder RTU	600 µl

All products are for research use only.

Caution: Not intended for human or animal diagnostic or therapeutic uses.