

07371 Novel Juice DNA stain

Product 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 GeneDireX'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.

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

Tracking Dyes

Bromophenol Blue, Xylene Cyanol FF and Orange G

Storage/Stability

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.

Procedure

- 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.

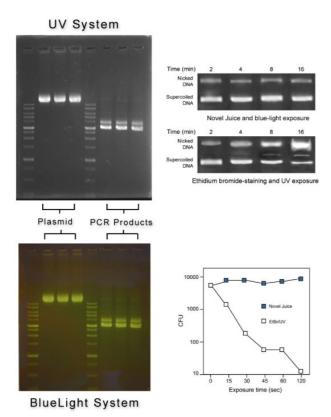
- 3. Load sample and run according to standard procedures.
- 4. After the electrophoresis, remove gel and place on UV or a visible -light transilluminator to immediately visualize bands.
- 5. Gels can be post-stained with Ethidium Bromide if desired.

Results

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.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

The vibrant M and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

