

FB No EtBr DNA 6X Loading Dye

Cat. No. DD0001

Store at -20°C and protect from light

Package: 1 ml/ vial

For research use only

Description

The FB No EtBr DNA 6X Loading Dye is a non-mutagenic fluorescent reagent that enables instant visualization of agarose or acrylamide-bound DNA bands upon exposure of Blue Light or UV. The dye has an extraordinary sensitivity for DNA at <1 ng, which makes it the most sensitive stain available; its ability to work with blue light also significantly limits UV-caused damages to gel-extracted DNA. Three tracking dyes are contained (Bromophenol Blue, Xylene Cyanol FF, and Orange G) for easy visual tracking of the DNA migration progress during electrophoresis. All in all, the FB No EtBr DNA 6X Loading Dye is an ideal replacement for EtBr in terms of cost effectiveness, safety, environmental friendliness, sensitivity and convenience.

Applications

1. Vortex the dye for 10 sec. prior to use.
2. Dilute 1 part Dye with 5 parts DNA sample and mix by pipetting.

Note: Dye 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 EtBr if desired.

Tracking Dyes

Bromophenol Blue, Xylene Cyanol FF, and Orange G.

Storage

Store at 4°C up to 12 months. For longer periods, store at -20°C. The FB No EtBr DNA 6x Loading Dye is light sensitive and should be stored away from light.

The FB No EtBr DNA 6x Loading Dye keeps your lab safe

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

Low Environmental Impact – Compliance with the Clean Water Act standards.

Sensitivity – Better sensitivity than that of EtBr.

Convenience – Ready to use, familiar procedure.

Speed – No de-staining requirement, low background value, and image displayed immediately after coupling with DNA.

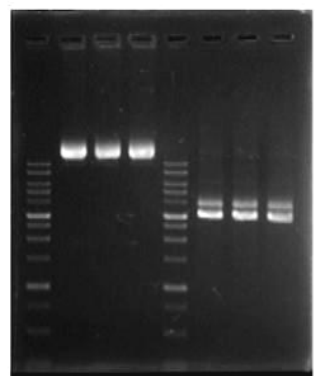
Compatibility – Use Blue Light or UV to detect the signal; Broad compatibility range.

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

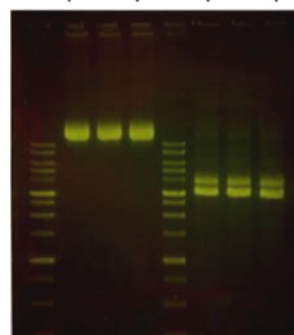
Less DNA damage, improved cloning efficiency

- A. Slower migrating species are indicative of a linear or relaxed circular vector resulting from DNA nicking or strand breaks.
- B. PCR fragments separated on agarose gels containing ethidium bromide or No EtBr DNA 6x Loading Dye 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.

UV System

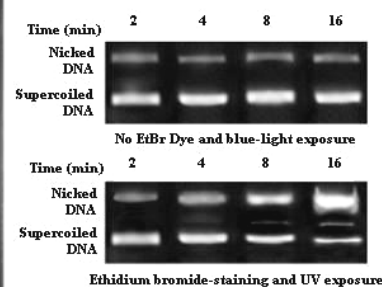


Plasmid PCR Products



BlueLight System

A



Ethidium bromide-staining and UV exposure

B

