## 6x Fluo- DNA Loading Buffer (Catalog #: LB-201X)

Sizes: 1.0ml(6x)

Storage: Stored at -20°C.

**6x Fluo-DNA Loading Buffer (LB-201X) contains** 6x fluorescent DNA dye and **two** inert green tracking dyes: blue and yellow, at approximately 4kb and 20bp that help visualize the electrophoresis progress.

## **Features and Benefits:**

- **1. Safe:** Non-toxic and non-genotoxicity for waste disposal, directly into the wastewater systems or clean up with water and 70% ethanol. No need to expose your skin and eyes on UV light.
- **2. Sensitive:** Detect down to 20-50 ng of DNA per band with blue light and 1-5 ng of DNA per band with UV light.
- **3. Convenient**: Visualize DNA bands with a blue light transilluminator or U.V transilluminator during/after electrophoresis in TAE/TBE buffer.
- **4. Effective:** Eliminating ultraviolet and EtBr induced mutation or cleavage of DNA fragments.
- **5. Compatible:** Fluorescent DNA dye can be completely removed from nucleic acids by alcohol precipitation or Qiagen QIAquick Gel Extraction, suitable for downstream cloning/subcloning applications.

## **DNA Staining Protocol:**

- 1. Prepare 0.5% to 2% of agarose gel solution in 1xTAE, TBE or FB-500 Buffer without Ethidium Bromide or other DNA dyes in a glass flask.
- 2. Heat in the microware until the solution is completely clear and no small floating particles are visible (about 2-3 minutes). Pour the gel solution into a gel tray after cool down. After the agarose gel has solidified you can perform electrophoresis.
- 3. Add 2  $\mu$ l of the 6X fluo- DNA loading buffer (LB-201X) to 10  $\mu$ l DNA sample or DNA marker/ladder. Mix thoroughly.
  - 4. Load samples and run the gel using your standard protocol.
  - 5. View DNA bands using a blue light transilluminator during or after electrophoresis.
  - 6. Images can be taken using a blue light transilluminator or a UV transilluminator.

## **Technical Tips:**

- 1. Loading 50ng-200ng DNA each lane is ideal for viewing DNA bands in agarose gels. Too much would affect the DNA migration.
- 2. Mix well the DNA samples or ladders with 6x fluo-DNA loading buffer by pipetting up and down for several times.

Precautions and Disclaimer: This product and procedure described are intended for R&D use only. Purchase of this product does not convey a license to perform any patented process.

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