Blue Juice 6X loading buffer

Basic principle

Blue Juice is employed to load samples into agarose gel. It allows the sample to be introduced into each well and sink, preventing overflow. It also allows the sample to be observed as it migrates through the gel, providing evidence of its migration.

Required equipment and consumables

Bromophenol blue
EDTA (pH 8.0) – 10 mM
Final container
Glycerol
Pipettes and tips
Water
Xylene Cyanol

Procedure

Dissolving dyes:

In a tube, add 25 mg Bromophenol Blue and 25 mg Xylene Cyanol FF.

Add 5 mL of distilled water and mix well.

Add glycerol:

Add 3 mL of glycerol to the solution to increase sample density.

Add EDTA:

Add 100 µL of 1 M EDTA (pH 8.0) to reach a final concentration of 10 mM.

Bring volume to 10 mL with distilled water.

Aliquot and store:

Store at 4°C for several months.

Usage

Dilute the blue juice from 6X to 2X using PCR water, then use 2X Blue Juice at a 1:2 ratio, depending on the sample type. The 1:2 ratio is adequate for PCR products (ideal 5 µL of blue juice and 10 µL of your sample). For highly concentrated samples, such as DNA extractions being used for verification, reduce the sample volume to be loaded.

Applications

It is mostly used for sample loading in agarose gels