PUREGENE
GENETIX BRAND

PRODUCT INSERT

6X DNA Loading Dye & SDS sol

Store at -20°C

Cat. No.	Pack Size	Concentration
PGN115	5 X 1 ml	6X

Description

The 6X DNA Loading Dye is recommended for preparation of DNA samples with high amounts of DNA binding proteins before loading on agarose and polyacrylamide gels. The optimized 6X DNA Loading Dye contains two electrophoresis tracking dyes: bromophenol blue and xylene cyanol FF. It also contains 100 mM EDTA.

EDTA binds divalent metal ions, inhibits metal dependent enzymatic reactions and protects DNA from metal dependent nucleases, effectively inactivating enzymes and protecting DNA from nucleases. Proteins have to be denatured to release DNA from DNA-protein complexes or the DNA binding proteins can alter electrophoretic DNA migration and cause DNA samples to stick to gel wells or band shifts.

Components

0.03% bromophenol blue

0.03% xylene cyanol FF

60% glycerol

1% SDS

100 mM EDTA (pH 7.6, adjusted with Tris)

Guidelines for use

1 Add 1 volume of 6X DNA Loading Dye to 5 volumes of DNA sample.

2 Mix well.

3 Heat at 65°C for 10 minutes.

4 Chill on ice, spin down and load.

Note

- Bromophenol blue co-migrates with ~300 bp DNA, while xylene cyanol FF co-migrates with ~4000 bp DNA in 1% agarose gels
- The prepared sample can be stored at -20°C and is viable for several freeze-thaw cycles.

Tested for DNA sample preparation prior to agarose gel electrophoresis.