

6×DNA Loading Buffer with SDS

REF: EG21915S

Storage Condition

Store at room temperature

Components

| Component | Amount |
|-------------------------------|--------|
| 6×DNA Loading Buffer with SDS | 5×1 ml |

Description

The main components of 6×DNA Loading Buffer with SDS are glycerol, EDTA, SDS, Orange G, and Xylene Cyanol FF. The presence of glycerol ensures that the DNA in the ladder and sample forms a layer at the bottom of the well. The EDTA included in the solution binds divalent metal ions and inhibits metal-dependent nucleases. SDS helps dissociate DNA-protein complexes which can interfere with electrophoresis. The tracking dyes Orange G and Xylene Cyanol FF indicate the progress of electrophoresis, allowing us to terminate the process at the appropriate time.

The migration distance of dyes corresponding to the gel concentration:

| Agarose gel concentration | Orange G | Xylene Cyanol FF |
|---------------------------|----------|------------------|
| 0.8% | ~80 bp | 4000 bp |
| 1.0% | ~40 bp | 2000 bp |
| 1.5% | ~20 bp | 1500 bp |
| 2.0% | <10 bp | 1200 bp |
| 2.5% | <10 bp | 1200 bp |
| 3.0% | <10 bp | 1200 bp |

Protocol

- 1. Please use a 6-fold dilution by adding 1 µl of 6× DNA Loading Buffer with SDS to every 5 µl of DNA sample.
- 2. After mixing, directly load the mixture into the wells of the DNA gel for electrophoresis.

Notice

1. For your safety and health, please wear a lab coat and disposable gloves while conducting the experiment.