

OXGEN™ Loading Buffer (6X)

LDBF-00B-005

LDBF-00N-005

LDBF-003-005

Description

Loading buffers function as loading dyes to visually monitor DNA migration during electrophoresis. They may contain tracking dyes such as Bromophenol blue, Xylene Cyanol, and/or Orange G. Bromophenol blue migrates swiftly in the agarose gel, denoting the migration of DNA fragments ranging from 300 to 500 base pairs in a 1% agarose gel. In contrast, Xylene cyanol migrates more slowly, corresponding to DNA fragments of 4,000 to 5,000 base pairs in the same gel concentration. Conversely, Orange G migrates very rapidly by comparison, indicating the migration of a 50 base pair long DNA fragment in a 1% agarose gel.

The inclusion of EDTA in the solution safeguards the sample from nuclease degradation, while the addition of glycerol imparts high density to the solution. This high density causes the sample to settle at the bottom of the well, facilitating the confinement of DNA samples within the well and preventing their diffusion out of it.

Features

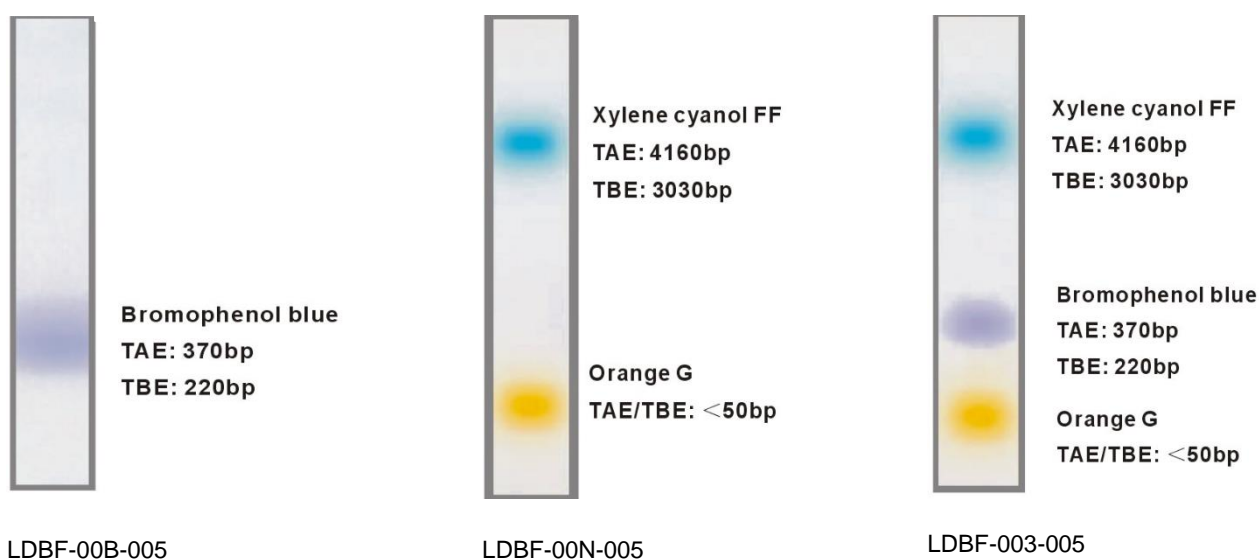
- ✓ Color tracking of DNA migration during electrophoresis.
- ✓ No DNA masking during gel exposure to UV light.
- ✓ EDTA binds divalent metal ions and inhibits metal dependent nucleases.
- ✓ Analysis of DNA molecules on agarose or polyacrylamide gels.

Concentration

LDBF-00B-005: 10mM Tris-HCl (pH 7.6), 0.03% Bromophenol Blue, 60% Glycerol, 60mM EDTA.

LDBF-00N-005: 10mM Tris-HCl (pH 7.6), 0.03% Xylene Cyanol, 0.15% Orange G, 60% Glycerol, 60mM EDTA.

LDBF-003-005: 10mM Tris-HCl (pH 7.6), 0.03% Xylene Cyanol FF, 0.03% Bromophenol Blue, 0.15% Orange G, 60% Glycerol, 60mM EDTA.



Storage

Store at RT or at 4 °C for up to 12 months. For longer periods of time, store at -20 °C.

Product use limitation

This product is developed, designed, and sold exclusively for research purposes and use only. The product is not intended for diagnostics or drug development, nor is it suitable for administration to humans or animals.

Usage Recommendations

1. Add 1 volume of 6x Gel Loading Dye, Blue to 5 volumes of DNA sample.
2. Mix well, spin down and load.