

25-bp DNA Marker

Cat. no.: TP-25bp

Storage: Store at $-20\text{ }^{\circ}\text{C}$ for 2 years, avoid repeated freeze–thaw cycles

Product size:

Content	Volume
DNA ladder	500 μL
6 \times Loading dye (TT-GN-DLB-100)	1 mL

Introduction

The ladder contains nine double-stranded DNA bands that are designed for the sizing and approximate quantification of wide-range molecular weight standards on agarose gels. The ladder is composed of nine purified DNA fragments (in base pairs). The amounts of DNA in each band per 5- μL loading are as follows: 300 (110 ng), 200 (32 ng), 175 (30 ng), 150 (25 ng), 125 (20 ng), 100 (72 ng), 75 (55 ng), 50 (85 ng), and 25 (85 ng).

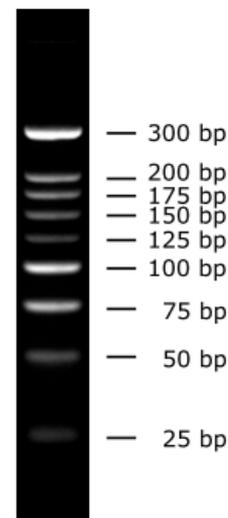
Buffer Contents:

10 mM Tris-HCl (pH 8.4)

5 mM EDTA

Protocol

1. Premix the marker with 6 \times loading dye at a 5:1 ratio. Load 3–6 μL of the mixture directly on an agarose gel (load 1 $\mu\text{L}/\text{mm}$ gel wall width).
2. Electrophoresis settings: 4% agarose gel, 100 V.
3. Visualize the DNA marker by staining with EtBr or TOOLS DNA viewed under UV light.



8 cm 4% agarose gel in
0.5X TAE buffer
100V, 45min

Recommendations:

1. Do not heat before loading.
2. Concentration: 0.1 μg DNA/ μL .

This product is for research only. Not for diagnostic or clinical use.