

Datasheet

DNA Ladder 10 bp Prod. No: 3900001, 50 μg

Features:

Bioswisstec LowRange DNA-Ladder is composed of 11 chromatography-purified individual DNA fragments which are re-dissolved.



Description/Preparation:

Bioswisstec LowRange DNA Ladder I is specially designed for electrophoretic analysis of small DNA fragments in the range of 10 to 300 base pairs on high percentage agarose (5 %) and polyacrylamide (8 – 10 %) gels. The 50 bp band has a higher DNA content and serves as a size reference for easier orientation. There are no unspecific bands besides the fragments described below.

Usage: 1 µl/mm lane **Concentration:** 0,5 mg DNA/ml

Storage Buffer: 10 mM Tris-HCl pH 7.6, 1 mM EDTA Loading buffer (6X): 10 mM Tris-HCl (pH 7.6), 0.03 % bromophenol blue, 0.03 % xylene cyanol, 60 % glycerol and 60 mM EDTA

Number of bands: 300, 200, 150, 100, 75, **50**, 35, 25, 20, 15, 10 bp in 11 fragments



Loading:

I. Agarose gels

DNA-Ladder has to be mixed with supplied 6x Loading Buffer before usage:

- 1-2 μl (0.5-1 μg) DNA-Ladder
- 1 µl 6x Loading buffer
- 4-3 μl ddH₂O

Vortex directly prior to use. 6 µl prepared marker is sufficient for 5 mm lane. Do not heat before loading! 50 µg marker is sufficient for ca. 100 lanes (5 mm lane width).

II. Polyacrylamide gels

DNA-Ladder has to be mixed with supplied 6x Loading Buffer before usage:

- 1-2 μl (0.5-1 μg) DNA-Ladder
- 0.5 µl 6x Loading Buffer
- 1.5-0.5 μl ddH₂O

Vortex directly prior to use. 3 μ l prepared marker is sufficient for 5 mm lane. Do not heat before loading! 50 μ g marker is sufficient for ca. 50 lanes (5 mm lane width).

Quantification:

See the graph for the percentage of the bands and the amount of DNA per band in ng, relating to 0.5 μ g loaded marker. Use the same volume of DNA and marker.

Additionally the concentration of loading buffer in samples and marker should be equal.

Ethidium bromide migrates contrarily to the DNA during electrophoresis. Therefore the distribution of ethidium bromide in the gel is not constant. To ensure equal distribution of ethidium bromide in the gel add 0.5 mg/l ethidium bromide to electrophoresis buffer or dye the gel after the run.

Transportation: Shipped on blue ice or room temperature

Storage: at -20°C for 24 months

Ordering information:

Prod. No	Description	Quantity
3900001	10bp LowRange DNA-Ladder	50 µg
3900002	10bp LowRange DNA-Ladder	5 x 50 µg