100bp DNA Ladder

FB02505005 50 µg for 100 applications
FB02505055 250 µg for 500 applications
Store at -25°C to -15°C

The 100bp DNA Ladder is intended for sizing and approximately quantifying a broad range of double-stranded DNA on agarose and polyacrylamide gels. This ladder includes fourteen chromatography-purified DNA fragments (in base pairs): 3000, 2000, 1500, 1200, **1000**, 900, 800, 700, 600, **500**, 400, 300, 200, and 100. It features two reference bands (1000 and 500 bp) for easy orientation and is dissolved in TE buffer.

Kit Contents

Reagents	FB02505005	FB02505055	Notes
100 bp DNA Ladder, 0.5 µg/ µL	50 µg	250 (5 x 50) µg	Stored in 10 mM Tris-HCl (pH 7.6), 1 mM EDTA.
6X DNA Loading Dye	1 mL	2 x 1 mL	10 mM Tris-HCl (pH 7.6), 0.03% bromophenol blue, 0.03% xylene cyanol FF, 0.15% orange G, 60% glycerol and 60 mM EDTA

Protocol

For a 5 mm gel lane, mix the following components gently and load on the gel:

Components	Gel Type	
	Agarose	Polyacrylamide
DNA ladder (0.5-1 µg)	1-2 µL	1-2 µL
6X DNA Loading Dye	1 µL	0.5 µL
Deionized water	4-3 µL	1.5-0.5 µL
Total Volume	**6 µL**	**3 µL**

For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2-0.4 µL (0.1-0.2 µg) of DNA ladder per 1 mm of lane.

Notes

- Do not heat before loading.
- Dilute your DNA sample with the 6X DNA Loading Dye (supplied with the ladder): mix 1 volume of the dye solution with 5 volumes of the DNA sample.
- Load the same volumes of the DNA sample and the DNA ladder.
- For quantification, adjust the concentration of the sample to equalize it approximately with the amount of DNA in the nearest band of the ladder.
- **Important note:** For DNA bands visualization with GelRed™ use gel staining after electrophoresis to avoid aberrant DNA migration.

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