1kb DNA Ladder

FB02506055 250 µg for 500 applications
Store at -25°C to -15°C

The 1 kb DNA Ladder is intended for sizing and quantifying a broad range of double-stranded DNA on agarose gels. This ladder includes fifteen chromatography-purified DNA fragments (in base pairs): 20000, 10000, 7000, **5000**, 4000, 3000, 2000, **1500**, 1000, 700, **500**, 400, 300, 200, 75. It features three reference bands (5000, 1500 and 500 bp) for easy orientation and is dissolved in TE buffer.

Kit Contents

Reagents	Volume	Notes
1 kb DNA Ladder, 0.5 µg/µL	5 x 50 µg	Stored in 10 mM Tris-HCl (pH 7.6), 1 mM EDTA.
6X DNA Loading Dye	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 agarose gel lane, mix the following components gently and load on the gel:

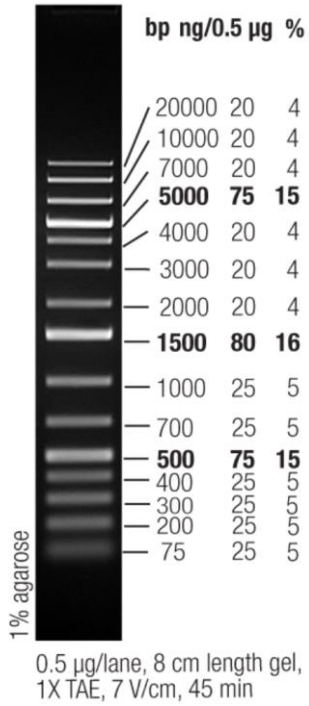
Components	Volume
DNA ladder	1 µL
6X DNA Loading Dye	1 µL
Deionized water	4 µL
Total Volume	**6 µL**

For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2 µL (0.1 µg) of 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.

1 kb DNA Ladder



0.5 µg/lane, 8 cm length gel, 1X TAE, 7 V/cm, 45 min

Note: Formation of diffused bands of small DNA fragments is a feature of agarose gel electrophoresis.