

1 Kbp DNA Ladder (500 – 10000 bp)

Cat. Number: PF00300

Fragment sizes (base pairs)

11 Fragments **500 1000 1500 2000 2500 3000 4000 5000 6000 8000 10000 bp**

Kit Contents

- 1 tube 1 Kbp DNA Ladder (50 µg, **green lock**) for up to 100 loadings at 0.5 µg/lane
- 1 tube with 1 mL sterile 1 x loading buffer

1 Kbp DNA Ladder was manufactured from plasmids with specific sites of mutation¹⁾, following restriction with EcoRI, digestion, de-proteination with phenol/chloroform, precipitation, de-salting and spectroscopic analysis. The marker is lyophilized for long-term storage. All fragments are present in equimolar amounts.

1) One mutagenesis site per plasmid is protected legally. Amplification of the plasmids is not allowed without our written consent.

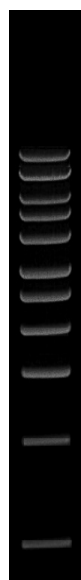
Instructions

Before first usage

1 Kbp DNA Ladder should be dissolved in 1 mL sterile 1 x loading buffer to obtain a final concentration of 0.5 µg/10 µL or depending on other intended use in sterile, double distilled water or TE. Dissolve 1 Kbp DNA Ladder by gently shaking it for 10 min at room temperature in the appropriate buffer.

1 x loading buffer, sterile

TRIS/HCl pH 7.5	10 mM
Na-acetate	5 mM
EDTA	2 mM
Glycerol	10 %
Bromophenol blue	0.02 %
Xylenecyanol blue	0.015 %



Size bp	1 µg DNA marker/lane ng DNA	0.5 µg DNA marker/lane ng DNA	0.25 µg DNA marker/lane ng DNA
- 10000	230	115	58
- 8000	184	92	46
- 6000	138	69	35
- 5000	114	57	29
- 4000	92	46	23
- 3000	69	35	18
- 2500	57	29	14
- 2000	46	23	12
- 1500	34	17	9
- 1000	23	12	6
- 500	12	6	3

Sample loading on agarose gels

For agarose gel electrophoresis 0.25 – 1 µg DNA marker per lane are recommended for fluorescence detection of ethidium bromide stained gels.

Storage

The lyophilized marker is stable at room temperature for >4 years.

Once dissolved, the DNA marker should be stored at 4°C.

Repeated (>20 x) thawing and freezing will damage the DNA marker and should be avoided.

Restrictions in use

This product may only be used *in-vitro* for analytical research purposes. It is not intended for diagnostic purposes or any use in human or animal systems.