

100 bp DNA Ladder (100 – 1000 bp)

Cat. Number: PF00100

Fragment sizes (base pairs)

11 Fragments **100** **150** **200** **300** **400** **500 (2x)** **600** **700** **800** **900** **1000 bp**

Kit Contents

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

100 bp 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. The single fragments are present in equimolar amounts except the 500bp fragment, which is present in double amount for quick detection on the gel.

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

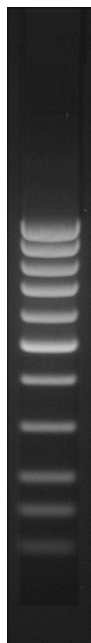
Instructions

Before first usage

100 bp 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 100 bp 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	1 µg DNA marker/lane	0.5 µg DNA marker/lane	0.25 µg DNA marker/lane
bp	ng DNA	ng DNA	ng DNA
- 1000	163	82	41
- 900	146	73	37
- 800	130	65	33
- 700	114	57	29
- 600	97	49	24
- 500	163	82	41
- 400	65	33	17
- 300	49	25	12
- 200	33	17	8
- 150	23	12	6
- 100	16	8	4

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.