





Perfect 100 bp DNA Ladder

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Cat. No. Size E3134-01 50 μg E3134-02 250 μg

Storage Conditions:

Short term: Store at +4°C Long term: Store at -20°C

Total DNA: 125 ug/ml 5 ul load = 625 ng DNA DNA ladder with 100 bp increments for sizing small-to-medium DNA fragments.

Description:

- → Ideal for sizing linear double-stranded DNA fragments from 100 to 2500 bp.
- → Contains 13 bands with fragments of the following sizes: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1500, 2000 and 2500 bp, respectively.
- → For easy reference, bands at 500 and 1000 bp are brighter than other bands in the ladder.
- Can be 5'-end labeled with radioisotopes and T4 Polynucleotide Kinase for visualization by autoradiography after a dephosphorylation step.
- → Supplied in ready-to-load buffers containing tracking dyes.
- → No preparation before loading required.

Storage Buffer:

10 mM Tris-HCI (pH 8.0 at 22°C), 1 mM EDTA, dyes.

Loading:

The recommended amount of size marker to load on a gel is $0.6-1.2~\mu g$ per lane (approx. $2-5~\mu l$) depending on gel type and size of well. Mix well after thawing.

Concentration:

The Perfect 100 bp DNA Ladder is supplied at 125 $\mu g/ml$ in 10 mM TrisHCl (pH 8.0), 1 mM EDTA.

Brief Guidelines for High Quality Gel Pictures

There is no magic about creating gel pictures in publication quality. Simply follow some guidelines:

- → Use rather large instead of small gels (distance between electrodes approx. 30 cm).
- → Use low voltage (~80-100 V for large gels, as a rule of thumb 70-75 % of the voltage used for routine electrophoresis).
- → Allow the electrophoresis to proceed slow.
- → Use fresh buffers for preparing gels. Ideally, prepare fresh buffers prior to gel electrophoresis.
- → Prepare gels with narrow, slim gel pockets.
- → Use only high quality agarose for preparation of agarose gels. Criteria for high quality agarose: White powder before melting, completely transparent after melting.
- → It is not necessary to purchase costly special purpose agarose formulations, such as "low melting" agarose.