

Life Technologies India Pvt. Ltd.

20 Base Pair DNA Ladder Catalog # L-100

Description

This ladder consists of 25+ blunt end DNA bands at exactly 20 bp to 500 bp in 20 bp increments. . A high intensity 100 bp band facilitates band identification. G+C content of all bands is 50%.

Quantity Supplied: 500 UI sufficient for 250 loadings
Storage Buffer: 10 mM Tris-HCl, 1 mM EDTA, pH 8.0 (TE buffer)
Store at: -20 °C or below.

Repeated freeze-thaw cycles have no effect on this product. Vortex gently after thawing.

Recommended Use:

Make a ready to use working solution of the ladder in the tube labeled "Working Solution" as follows:

- 50 µl 5X sample loading buffer (see Maniatis for formulation)
- 100 µl TE buffer
- 100 µl ladder stock solution

The working solution may be stored at 4 °C for a few weeks. For longer term storage of the working solution, store at -20 °C. Store the ladder stock solution at -20 °C or below. Using the recommended working solution, a standard 10 µl loading volume for 3 mm wells is sufficient for visualizing the bands by ethidium bromide staining after the gel run. Best results are obtained by filling wells completely. Each tube of ladder stock solution provides 250 loadings. In case, if working on higher concentration of agarose, you can consider to use 4 µl instead of 2 µl per loading.

Tips for Achieving the Best Results:

- (1) The 20 bp ladder is used in polyacrylamide gel electrophoresis (PAGE). PAGE separates by size and by shape of the DNA. Therefore, two sequences of the same size may migrate differently in PAGE. Nevertheless, the 20 bp ladder can be used as a reference point in PAGE. 2 µl of stock solution is required per loading. Bands can be easily seen by ethidium bromide staining. A single tube of stock solution, when used for PAGE, should be sufficient for 250 loadings.
- (2) To facilitate assignment of bands above 200 bp, it is helpful to run a 100 bp DNA ladder in an adjacent lane (catalog L-101).
- (3) To pinpoint the location of a sample band relative to the ladder, try the following technique. Run three lanes in parallel: sample only, sample + ladder mix, ladder only. This technique is especially useful for bands above 200 bp.
- (4) Make sure that the gel is stained thoroughly with ethidium bromide, otherwise the bands may be difficult to see.
- (5) If the working solution will not be used for several weeks, store it in the freezer. Thaw the working solution completely and vortex before use.

Marketed by:

Life Technologies (India) Pvt. Ltd.

Ph: 011-42208000 Fax: 011-42208444 Email: customerservice@lifetechindia.com

Visit us at: www.lifetechindia.com