



Cyrusbioscience

## Product datasheet

### DNA Ladder Marker, 100bp (unstained)

**Cat. Number:** 2009

**Description:**

This ladder consists of forty blunt end DNA bands at exactly 100 bp to 4,000 bp in 100 bp increments. Two features of the ladder facilitate band identification: (1) A high intensity 500 bp band, and (2) Bands from 1,000 bp to 4,000 bp are more intense than bands from 100 bp to 900 bp. G+C content of the bands is 48%.

**Storage:**

Storage buffer: 10 mM Tris-HCl, 1 mM EDTA, pH 8.0 (TE buffer).

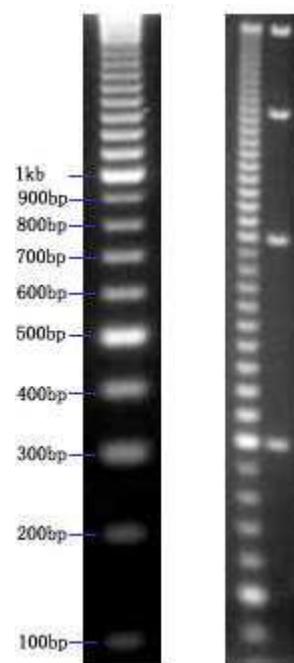
Stored at 4°C for a few weeks. For long term storage, store at -20°C.

**Range:** 100bp to 4kb

**Package:** 50ul/vial and 450ul loading buffer

**Recommended load:** 5-10u/Loading. All bands can be resolved using 0.6% - 1.0% agarose gel electrophoresis.

**Concentration:** The DNA concentration of the stock solution is 1.1 ug/ul. Thus, the average concentration of each band is about 28 ng/ul.



Left: 2% agarose gel showing bands from 100 bp to 2,000 bp. Right: 1% agarose gel showing bands from 400 bp to 4,000 bp.

The adjacent lane is a 1kb DNA Ladder.

**Tips for Achieving the Best Results**

- (1) Make a ready-to-use working solution of the ladder as follows: Add 50ul ladder stock solution to 450ul ready-to-use loading buffer (containing 50ul 10X loading dye and 400ul TE buffer). Vortex to mix well.
- (2) For best resolution of 100 bp to 1,500 bp, use 2.0% Metaphor agarose gel or equivalent agarose gel. For best resolution of 500 bp to 4,000 bp fragment, use 1.0% agarose gel. To facilitate assignment of bands above 1000 bp, it is helpful to run a 1kb DNA ladder in an adjacent lane.
- (3) To pinpoint the location of a sample band relative to the ladder, try the following technique. Run three lanes in parallel: sample only,