



## 100 Base Pair DNA Ladder

Cat. No.: WSDL100 package:50ug/vial

### Product 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%. The DNA concentration of the stock solution is 1.1 ug/ul. Thus, the average concentration of each band is about 28 ng/ul.

### Storage:

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

Store at -20 or below.

**Note: Repeated freeze-thaw cycles have no effect on this product. Thaw the stock solution at 37 completely and mix well by vortexing gently before use.**

**請注意：為避免跑出的條帶模糊，從冷凍取出請先 37°C回溫，再Vortex混和均勻，離心後使用。**

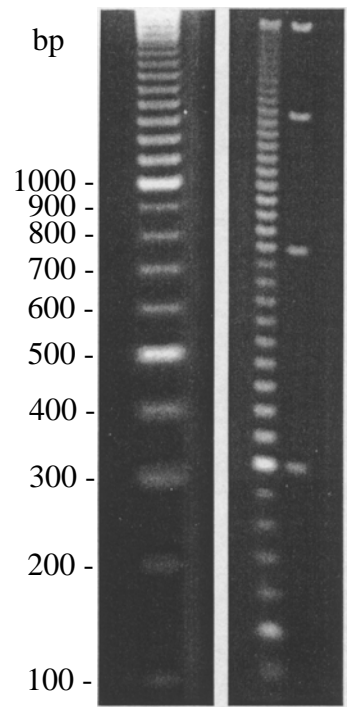
**另外，大於 1k 部分因為條帶較緊密，跑一般小膠的電泳時間較短，無法分開，建議跑大膠，延長電泳時間，或換用 1k Ladder Marker。**

**Figure:** Ethidium bromide stained gel.

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 50 u1 ladder stock solution to 450ul ready-to-use loading buffer (containing 50ul 10X loading dye and 400 ul TE buffer). Vortex, mix well.

Use **5 - 10 u1 of working solution per loading.**

The working solution may be stored at 4 for a few weeks. For long term storage, store at -20.

**Thaw the working solution at 37 completely and vortex gently before use.**

(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, sample + ladder, ladder only. This technique is especially useful for bands above 1,000 bp.