



*Methodology*

## **Simplified preparation of a DNA ladder using PCR**

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**ABSTRACT.** Serving as a DNA molecular weight standard, the DNA ladder has been widely used in molecular biology applications. We developed a simple method for the preparation of a DNA marker, which involves designing primers to amplify 100- to 1000-bp DNA fragments using lambda DNA as a template for polymerase chain reaction, followed by extraction with phenol/chloroform, precipitation with ethanol and mixing. Fragments of 100- to 1000-bp DNA were successfully amplified; the sequences showed 100% identity with lambda DNA. This prepared DNA marker displayed clear bands, indicating that it can be used for molecular studies.

**Key words:** DNA; Ladder;  $\lambda$  DNA; Polymerase chain reaction