DNA Marker/Ladder

NB-54-0034-01

74 rue des Suisses
92000 Nanterre
info@neo-biotech.com

DNA Marker/Ladder

Cat # NB-54-0034-01

Introduction:

This product consists of double-stranded DNA fragments of specific molecular weight and is mixed with loading buffer containing a blue dye, which is suitable for DNA molecular weight standards in agarose gel electrophoresis. All fragments in the DNA Marker/Ladder are obtained by enzymatic digestion and purification. The bands of Marker/Ladder are clearer and denser during electrophoresis; the mass ratio between the bands is more accurate and truer. The 750 bp fragment in the DL2000 Plus DNA Marker, the 1,000 bp fragment in the DL5000 DNA Marker, the 500 bp fragment in the 100 bp DNA Ladder, and the 5 kb fragment in the 1 kb DNA Ladder have a DNA concentration of 100 ng/5 µl, which are bright bands; all remaining bands have a DNA concentration of 50 ng/5 µl.

Components

Components	250 µl (50 rxn, 5 µl/rxn)	500 µl (100 rxn, 5 µl/rxn)
DL2000 Plus DNA Marker	NB-54-0031-01	NB-54-0031-02
DL5000 DNA Marker	NB-54-0032-01	NB-54-0032-02
DL15000 DNA Marker	NB-54-0033-01	NB-54-0033-02
100 bp DNA Ladder	NB-54-0034-01	NB-54-0034-02

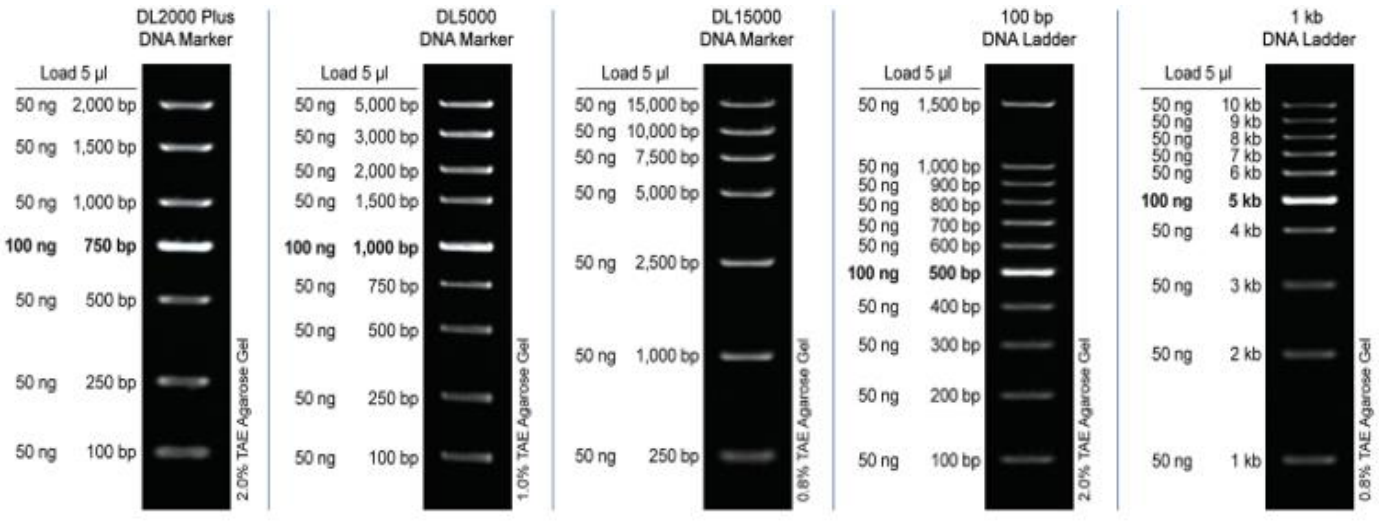
*Stored in 10 mM Tris-HCl (pH 8.0); 10 mM EDTA; 6% Glycerol; 0.01% Bromophenol Blue; 0.005% Xylene Cyanol.

Storage

Store at -20°C; store at 4°C after thawing to avoid repeated freezing and thawing.

Experiment Process

1. This product is a ready-to-use product. You can directly take 5 µl of the product into the wells of the agarose gel for electrophoresis (if the spotting holes are wide, you can increase the loading amount).
2. It is recommended that the electrophoresis conditions be 1 × TAE buffer, 0.8 - 2.0% agarose gel, and the voltage between positive and negative electrodes is 4 - 10 V/cm.
3. Two electrophoretic indicators of Xylene Cyanol and Bromophenol Blue have been added to this product. If a 1% agarose gel is used, the xylene cyanide band is located at approximately 2 kb and the bromophenol blue band is located at approximately 400 bp.
4. The electrophoresis bands are observed under UV light by staining with nucleic acid dyes. The figure below shows the results of NeoBiotech DNA Marker/Ladder electrophoresis



Notes

1. Please thaw and mix thoroughly before use.
2. The quality of the electrophoresis image is related to the agarose gel and the electrophoresis buffer. Please use high quality agarose, freshly prepared agarose gel, and replace the running buffer in time to avoid affecting the electrophoresis results.
3. The concentration of the agarose gel is critical for the separation of DNA fragments. Higher concentrations of agarose gel have better separation performance for short fragments of DNA, while lower concentrations of agarose gel facilitate separation of long fragment DNA. According to the actual situation, a suitable concentration of agarose gel can be selected for electrophoresis.
4. After the DNA fragments of equal mass are stained by electrophoresis or nucleic acid dye, the fragments with smaller molecular weight are lightly colored and the bands are thick; the fragments with larger molecular weight are darker and the bands are fine. It is a normal phenomenon.
5. If EB is used as the nucleic acid dye, it should be noted that the electrical properties of EB are opposite to those of DNA, and EB and DNA migrate in the opposite direction during electrophoresis. If EB is added in the preparation of agarose gel, when the electrophoresis is carried out for a long time, the smaller molecular weight fragments in the DNA Marker/Ladder may be lightly colored and the bands are blurred, which is a normal phenomenon

74 rue des Suisses
92000 Nanterre
info@neo-biotech.com