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# 50 bp DNA Marker

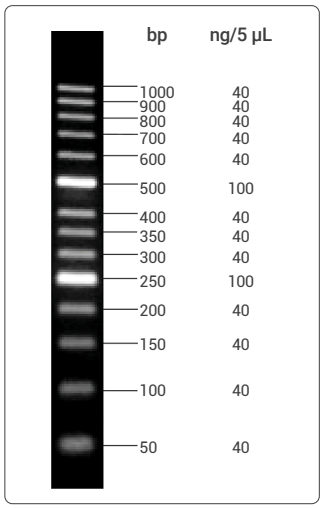
## 1 Contents

| Components | HY-K0801-250 μL | HY-K0801-500 μL | HY-K0801-1 mL |
|---|---|---|---|
| 50 bp DNA Marker | 250 μL | 250 μL × 2 | 250 μL × 4 |

## 2 Introduction

The 50 bp DNA Marker is provided in a solution of 1× DNA Loading Buffer, which can be directly used for nucleic acid electrophoresis analysis. The Marker contains 14 double-stranded DNA fragments ranging from 50 bp to 1000 bp. 5 μL of this product contains about 100 ng for the 250 or 500 bp bands, and about 40 ng for the other bands.

## 3 Electrophoresis illustration




2.5% Agarose 0.5x TBE Buffer
5 μL/lane 7 V/cm, 50 min

## 4 Protocol

1. Add 5 μL of 50 bp DNA Marker to sample well of the agarose gel and perform electrophoresis.
2. After electrophoresis, stain with Nucleic Acid Gel Stain and detect the electrophoresis results.

Note: a) 2.0-3.0% agarose gel or 5% polyacrylamide gels at 5-10 V/cm is recommended.

b) Adjust the loading volume of DNA Marker for different loading well format.

c) Pre-dyeing or post-dyeing is suitable when using the Nucleic Acid Gel Stain.

## 5 Storage

-20°C, 2 year.

Avoid repetitive freeze-thaw cycles.

## 6 Precautions

1. For short-term use, DNA Marker may be stored at 2-8°C.
2. Replace the electrophoresis buffer in time and use fresh agarose gels to achieve better electrophoretic results.
3. When the concentration of agarose gel is too low, the bands will not be easy to separate.
4. This product is for R&D use only, not for drug, household, or other uses.
5. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## 7 Recommended products used for Nucleic Acid Gel Electrophoresis

| Cat. No | Name | Application |
|---|---|---|
| HY-K1031 | Agarose | Agarose gel |
| HY-K1029 | Agarose With TAE Powder (1%) | |
| HY-K1016 | TBE Powder (1 L of 1×) | |
| HY-K1015 | TAE Powder (1 L of 1×) | Electrophoresis buffer |
| HY-K1017 | Rapid Running Buffer Powder (1 L of 1×) | |
| HY-K1004 | SYBR Green I Nucleic Acid Gel Stain | Nucleic Acid Gel Stain |
| HY-K1007 | Red Nucleic Acid Gel Stain (10,000×) | |