



Ver. HB221107

## GoldBand™ 1kb DNA ladder

### Product description

The GoldBand™ 1 kb DNA ladder consists of thirteen double-stranded DNA fragments (250, 500, 750, 1,000, 1,500, 2,000, 2,500, 3,000, 4,000, 5,000, 6,000, 8,000, 12,000 bp). Since this product is premixed with 1× loading dyes, it can be used in agarose gel electrophoresis directly. The concentration of 1,500 and 4,000 bp fragments is 125 ng/5 μL, and the concentration of other fragments is 50 ng/5 μL. This product is suitable for the analysis of DNA fragments in agarose gel electrophoresis and is not recommended for polyacrylamide gel electrophoresis.

### Components

| Components No. | Name                     | 10510ES60<br>(100T) | 10510ES80<br>(10×100T) |
|----------------|--------------------------|---------------------|------------------------|
| 10510-A        | GoldBand™ 1kb DNA ladder | 500 μL              | 10×500 μL              |
| 10510-B        | 5×DNA Loading buffer     | 1 mL                | 10×1 mL                |

### Specifications

|                    |   |
|--------------------|---|
| Gel type           | Agarose                                   |
| Product type specs | Mixture of DNA molecular weight standards |
| Size range         | 250bp—12000bp                             |
| Gel compatibility  | Agarose gel                               |

### Shipping and Storage

The GoldBand™ 1kb DNA ladder products are shipped with ice pack and can be stored at 2°C ~ 8°C for 6 months, or stored at -15°C ~ -25°C for 12 months. Avoid repeated freeze thawing.

### Instructions

1. The loading volume of ladder is 5 μL. If gel wells are wider than the conventional, the loading volume needs to be increased appropriately.
2. It is recommended to use 1.0-2.0% Agarose, voltage 4-10 V/cm, 1× TAE (preferred) or 0.5× TBE buffer for electrophoresis.
3. Stain with nucleic acid dye such as EB or YeaRed, and observe the electrophoretic results under UV light.



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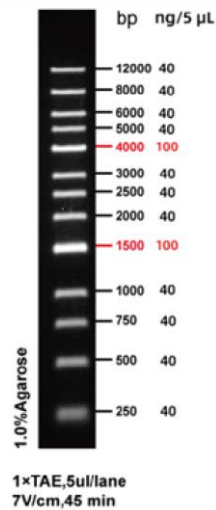


Figure 1. The electrophoretogram of GoldBand™ 1kb DNA ladder

## Notes

1. The product needs to be fully mixed when using. Please replace the electrophoresis buffer frequently and use the new prepared gel to achieve the ideal electrophoresis result.
2. The attached 5×DNA Loading buffer can be used for sample detection.
3. If there are unsatisfactory conditions such as smear, unclear or curved fragments when using this product for electrophoresis, it's recommended to try to dilute the sample before loading. For example, the sample can be diluted 5 times with water and then take 8-10  $\mu$ L for loading for conventional gel wells.
4. Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety!